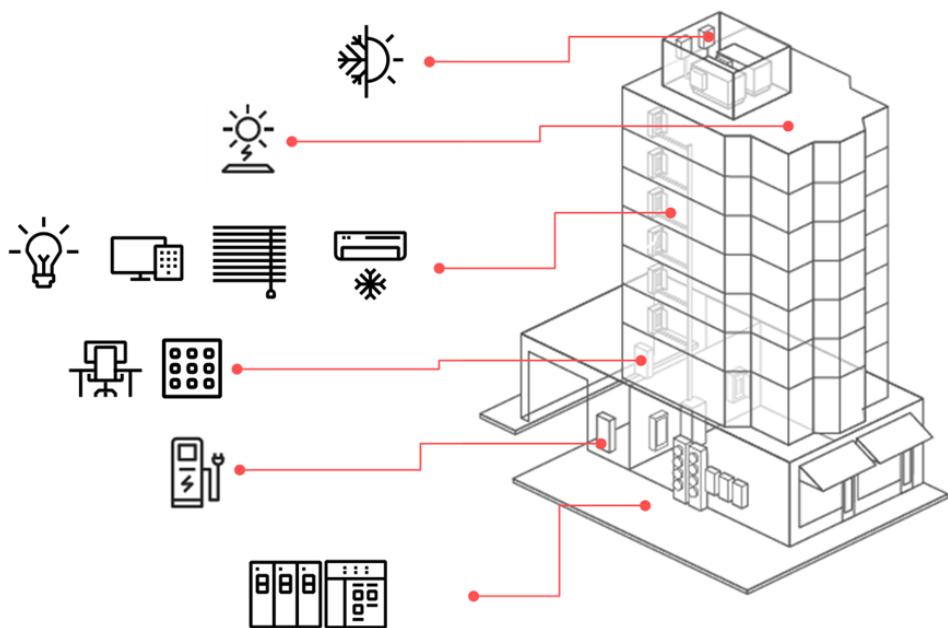




Chameleon

Chameleon HaaS SYSTEM TECHNICAL MANUAL





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Chameleon

INTRODUCTION



1. Chameleon HaaS

That Chameleon HaaS is an advanced hotel automation solution for hotel units with a capacity of one to ninety rooms. The solution is based on the KNX protocol fieldbus and includes room automation (with Split Unit Air Conditioning control) and central visualization for the reception.

The solution at the room level does not have the classic and unreliable card holder and is based on a sophisticated presence detection algorithm that uses a magnetic contact on the door and a conventional presence detector in each room.

Opening the door initiates the presence detection algorithm, for a certain period. If movement is detected within this interval, the system sets the room in "Occupied" state and stops the detection, thus avoiding any mistake during the guest's presence in the room. When the door closes the algorithm will check again for presence. If no presence is detected within the period, the room enters the "Vacant" state and initiates the energy saving scenarios. The presence control algorithm also has a failsafe for the case of wrongly estimating the absence of a guest from the room. If motion is detected in a "Vacant" room, the algorithm will set the room to "Occupied", but without changing the state of the lighting in the room.

In hotel rooms with automation and presence detection, it is a classic requirement that certain actions are performed automatically when the occupant enters and exits.

Entrance

- When the tenant enters the room, the automation system will activate the "Welcome Guest" scene, which turns on specific lighting points at a specified light level, will send a "comfort" climate scenario and activate the socket circuits
- If the room is occupied, **no** scene should be activated upon entry to avoid discomfort to the occupants (guest entry while someone is sleeping)

Exit

- When the tenant leaves the room in the "Guest Out" scene, all the lighting points in the room will be switched off, the air conditioning will switch to "standby" mode after a certain period of time and certain power outlet circuits will be switched off

At reception level the Chameleon available with ready visualization with room integration as well as supervisory functions for the state of the rooms and their management

2. Room configuration:

At room level there is a basic unit LOGO! and an expansion unit with a total of 16 inputs and 12 outputs available. The LOGO! module will be combined with conventional push buttons that the end customer will freely choose according to his aesthetic and cost criteria.

The inputs can either control lighting circuits directly (1--1), or trigger scenarios (Scene) to control more than one lighting line. The outputs are lighting circuits (with one or more lamps).

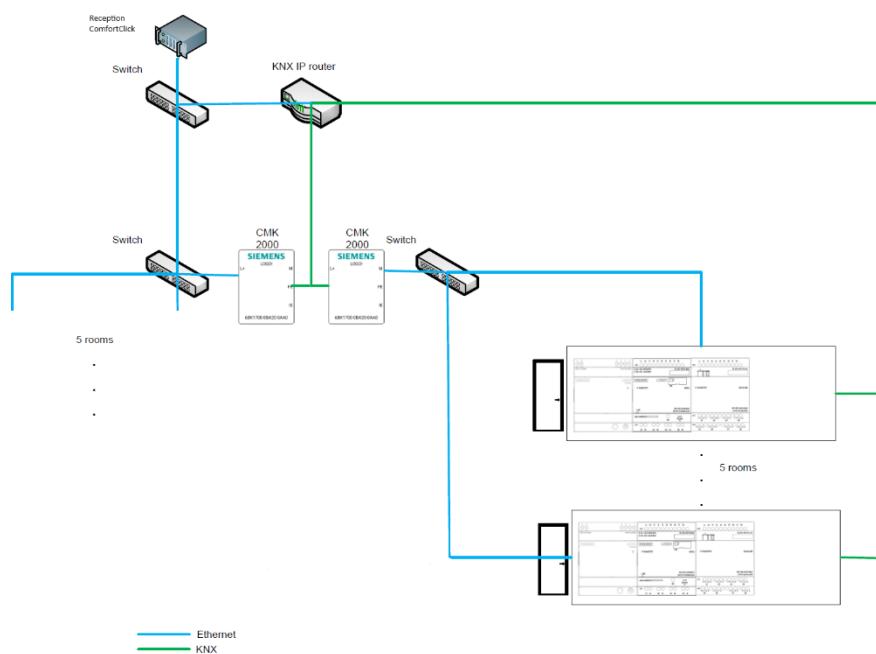
3. Devices / System Parts:

The system is divided into four categories of devices

- LOGO! devices (base unit, expansion unit and power supply). All LOGO! Devices are placed inside the room
- KNX devices. In each room, an Airzone gateway will be placed to control the air conditioning unit, and on the corridor consumer unit, a Siemens CMK 2000 device (for every five rooms) will be installed as a gateway between the LOGO ! and the KNX fieldbus.
- ComfortClick visualization (bOS PRO License) to be installed on a pc in the reception or on the hotel server
- A Finder Opta controller. This device is only one per project and it activates the operating license of the hotel for the number of rooms we have purchased. The hotel cannot operate without Opta and in case of failure it must be replaced within 30 days (for the reactivation of the hotel license). The license is included in Chameleon HaaS price and does not require renewal. It can be placed on any consumer unit in the hotel common spaces.
- A basic, non-active element, are also the conventional presence detectors. **Their output must be set to 10 sec, and the brightness setting to max (test mode).**

4. Cabling / topology:

The following figure shows the topology and general wiring of the system. From each room we have a KNX TP cable and an ethernet cable from LOGO!. For every five rooms in the corridor consumer unit, there will be a CMK2000 with KNX TP and ethernet connection. The ethernet cables will end up in the switches / structured cabling of the hotel where the KNX network will also be connected, since the KNX TP cable will in turn end up in one or more KNX IP routers.



5. Active items / program changes:

As described above we have four parts/types of devices in the system.

- LOGO! devices
- KNX devices
- ComfortClick visualization
- A Finder Opta controller

For each of the above categories there are ready files and changes to be made

6. LOGO! devices

If changes are needed the **LOGO! instructions** file will guide us through all the actions that need to be done to have an updated program for the LOGO! modules.

7. KNX devices

In the ETS files that we will receive, all the devices are ready for download. If we need to introduce additional routers into our topology, there are already a total of fifteen programmed routers in ETS project and we can simply drag as many devices as we want on new lines (see paragraph 4 in the "KNX_ETS" guide).

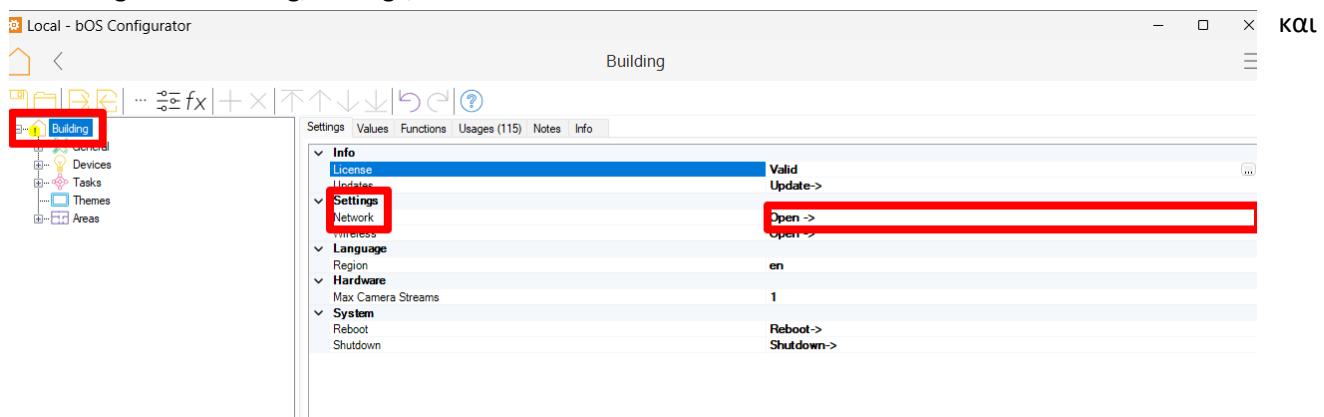
8. ComfortClick Visualization

We will receive a visualization for a 90-room hotel with the original design. If we have modified the original design, we have a different numbering or number of rooms, by sending our changes we will receive a new visualization for the hotel we designed, as well as new room drawings. Both the updated visualization and drawings are automatically generated

The visualization should be only installed in the hotel and we must set the IP to 192.168.0.98

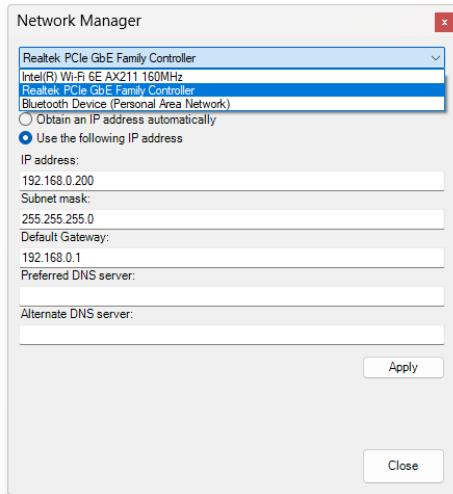
By changing the IP of ComfortClick, we are also setting the IP of the pc/server where it is installed..

We navigate to Building/Settings/Network

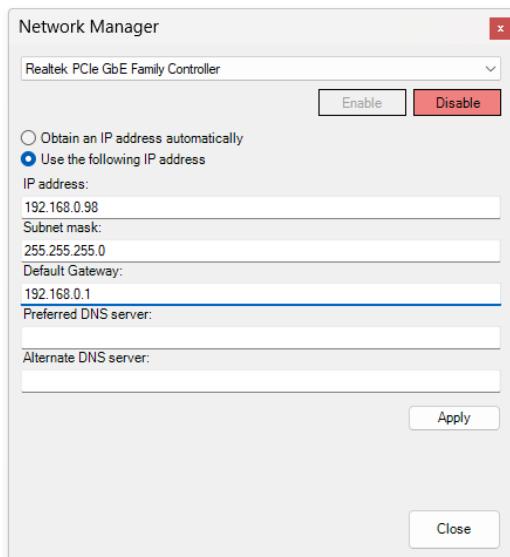




and in the network manager we choose the Wi-Fi or ethernet controller.
It is highly recommended to choose ethernet.



We select Use the following IP Address and we fill in the relevant fields by inserting the:
IP address-->192.168.0.98 SubnetMask-->255.255.255.0 Default Gateway-->192.168.0.1



We press the Apply button.

9. Finder Opta Controller

We will receive and install a program in the Opta device (Chameleon software license).



10. Ready and easily adaptable solution

Chameleon will come programmed with a design derived from our personal experience in more than 30,000 hotel rooms.

The first step is to check if this design suits us. For this purpose we will check in the Default folder export the IO settings , Scenes and Sensors files.

If we need to design a new room, we will use LOGO Hotel Configurator and just set our sensors, the lighting circuits and the scenes. The software will produce the following files.

11. Configurator (Files):

Name	Date modified	Type	Size
Circuits.pdf	2023-09-11 10:45:23	Adobe Acrobat D...	75 KB
Connections.pdf	2023-09-11 10:45:23	Adobe Acrobat D...	144 KB
IO Setting.pdf	2023-09-11 10:45:23	Adobe Acrobat D...	172 KB
LOGO Hotel Configurator LOGO! import.csv	2023-09-11 10:45:23	Microsoft Excel C...	5 KB
LOGO! instructions.txt	2023-09-11 10:45:23	Text Document	5 KB
Scenes.pdf	2023-09-11 10:45:23	Adobe Acrobat D...	128 KB
Sensors.pdf	2023-09-11 10:45:23	Adobe Acrobat D...	131 KB

IO setting : Main page

Connections : The sketch of LOGO !

Circuits : Graphical file of LOGO! programming

Scenes : The scenarios we created (empty or filled, as per our choice)

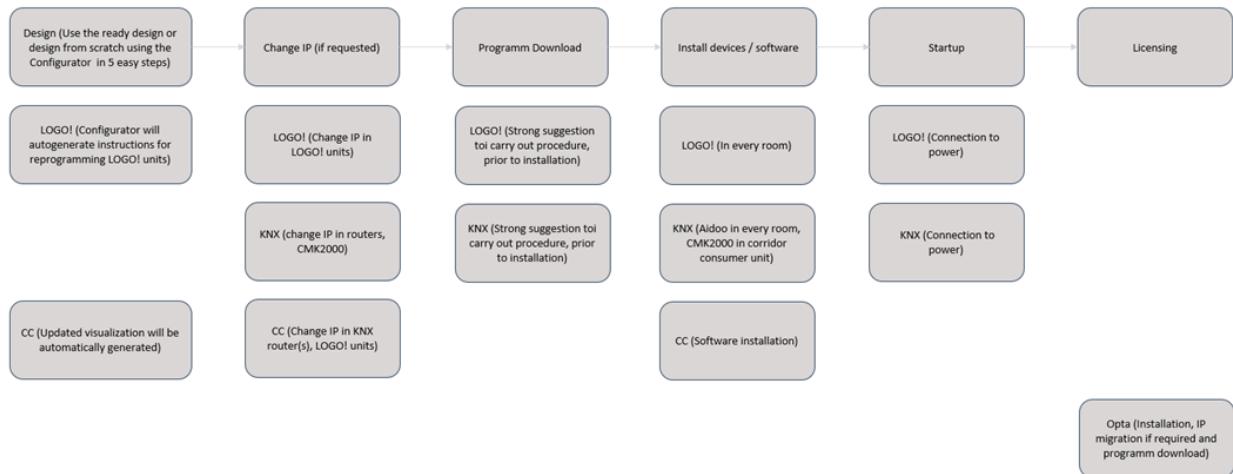
Sensors : Our push buttons (with or without schematic, as per our choice)

LOGO Hotel Configurator LOGO! import.csv: File that we will import into the diagrams of LOGO ! to update the LOGO ! Soft Comfort with the new name of the inputs and outputs (see "LOGO! Diagram program" guide).

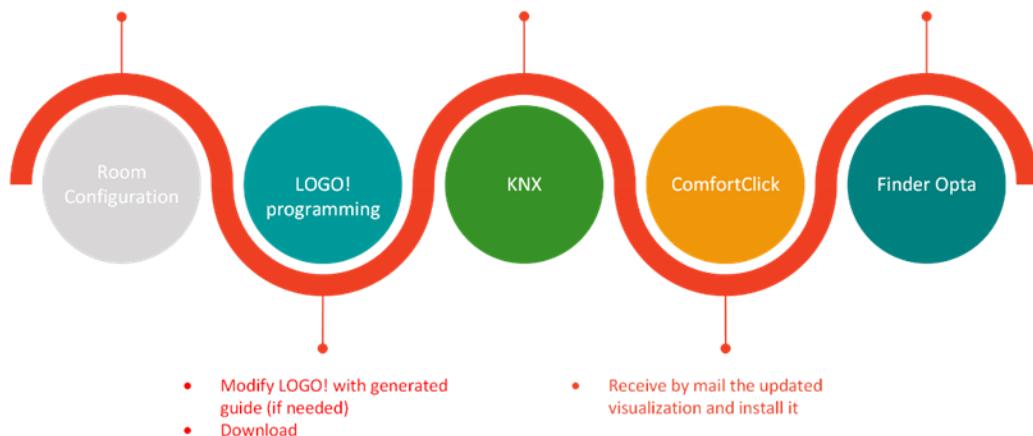
LOGO ! instructions : The file will guide us on the Diagram (.lsc) and Network (.snp) files we need to use to reprogram LOGO !. If LOGO! reprogramming is required , in the same file we will find step-by-step detailed instructions .

12. Task execution sequence

The order of execution of the tasks is shown below. There is the additional step of changing IP addresses if requested.



- Intuitive Configuration software allows for room design and autogenerated complete files and instructions
- Download to KNX devices
- Install the License



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Chameleon

Basic concepts

In every room there is a LOGO! base and a expansion unit combining to a total of 16 inputs and 12 outputs.

1. Inputs:

Inputs can be configured as Aux, 1--1, Scene.

Aux (Auxiliary): These inputs are auxiliary, i.e. they are inputs which should exist but are not operated by the tenant.

Three of them are already used and cannot be changed

(I1 / Magnetic door contact, I2 / Conventional attendance monitors, I3 / Magnetic window contact).

It is recommended to connect the Emergency cord to the I6 entrance marked as such, but if this function is not requested, I6 can be freely configured.

1--1(Direct control): When we choose 1--1 (one to one control) as input type, then this input controls directly only one LOGO! output(Lighting circuit).

Type	Controlled output
Aux (NC)	
Aux	
Aux (NC)	
1--1	Q5
1--1	Q6
Aux	
Aux	Q3
1--1	
1--1	Q4

Load/Scene name	Type of scene	Type	Controlled output
		Aux (NC)	
		Aux	
		Aux (NC)	
Foyer		1--1	Q5
Bathroom		1--1	Q6

We will choose 1--1 input type for the lighting loads where the tenant should be able to control them individually. Typical 1--1 loads are bedside lamps, desk and balcony lights. It is recommended that if there is only one line of lighting in the hall and the toilet, these should be configured as a 1--1 control.

Scene: A scene is used when there is a requirement to control more than one lighting circuits upon pressing a button.

Scenarios	7	Welcome Guest	Guest Out	Master On	Romantic
Circuits		Oc Guest In	Oc Guest Out	I13 (Out)	I14 (Out)
Q5	Foyer	+	-		-
Q6	Bathroom	+	-	+	
Q7	Balcony		-		-
Q8	Bedside Right		-		-
Q9	Bedside Leftt		-		-
Q10	Desk		-		-
Q11	Bedroom ceiling		-	+	-
Q12	Bedroom concealed lighting		-	+	+

A lighting circuit has three possible states; we want it to be set to on (+) script, set it to an off state (-), or we want its state to remain unchanged so it doesn't participate in the scene. Two scenarios already exist and are not controlled by buttons, Welcome Guest where we choose what we want to happen when the tenant enters the room (ingress to an empty room) and Guest Out where we choose what we want to happen when the tenant leaves the room (egress from an empty room).

1.1. Types of Scene:

A scene can be configured as three types

Description	Load/Scene name	Type of scene	Type
I9 Button Balcony	Balcony		1--1
I10 Button Bedside Right	Bedside Right		1--1
I11 Button Bedside Leftt	Bedside Leftt		1--1
I12 Button Desk	Desk		1--1
I13 Button scene Master On	Master On	Default	Scene
I14 Button scene Romantic	Romantic	Bright,Dark	Scene
I15 Button scene Night	Night	Toggle	Scene
I16 Button scene TV	TV	Default	Scene

1.1.1. Default Scene (one scene):

This type of scene is the classic one we know from KNX.

Activating the scene will set loads to a preconfigured state (on/off). Activating the scene again will have the same outcome.

1.1.2. Bright/Dark Scene (two scenes):

In this configuration we have two scenes at our disposal as the button press will be evaluated with the brightness of the room. For example, in the TV scene we would typically want to turn off the lights that can cause glare on the TV screen and turn on the hidden lighting or desk light. Selecting Bright/Dark, if the room is dark will turn the configured lights on, but in a bright room they will not turn on. So we will have to select our (+) and (-) twice for two different scenes.

1.1.3. Toggle Scene (two scenes):

In this configuration we have again two scenes at our disposal. The first time we press the button the first scene will be executed. The second time we press it, the second (**Toggle**) scene will be executed. A typical use would be in the Night scene. On the first button press the tenant will turn off all the lights. The second time he presses the button (assuming he wants to visit the toilet during the night) the toilet light will turn on. Pressing the button a third time will turn off all the lights again, and so on.

Scenarios	7	Night	Night (Toggle)
Circuits		I15 (Out)	I15 (Toggle)
Q5	Foyer	-	+
Q6	Bathroom	-	-
Q7	Balcony	-	-
Q8	Bedside Right	-	-
Q9	Bedside Leftt	-	-
Q10	Desk	-	-
Q11	Bedroom ceiling	-	-
Q12	Bedroom concealed lighting	-	-

So, like in the previous type we will have to select our (+) and (-) twice for two different scenes.

2. Outputs:

An output can either be configured as a General Load or as a Lighting Circuit.

Two outputs are already configured and cannot be altered (Q1 / Power outlets, Q2 / AC on/off). These two outputs are already preconfigured in Welcome Guest and Guest Out scenes and cannot participate in any other scenes.

General load: The concept of the General load is auxiliary, and like the Aux inputs they are necessary but cannot be controlled by the tenant.

Lighting Circuit: The output has one or more lighting loads in common control, forming a lighting circuit. It can be, for example, a ceiling light in the bathroom or a ceiling light and the sconces of the vanity.

Each output that we will define as a lighting circuit can be controlled by 1--1 input but also by scenes at the same time, for example the Foyer and the Bathroom lighting circuit in the following images.

Scenarios	7	Night	Night (Toggle)
Circuits		I15 (Out)	I15 (Toggle)
Q5	Foyer	-	+
Q6	Bathroom	-	-
Q7	Balcony	-	-
Q8	Bedside Right	-	-
Q9	Bedside Leftt	-	-
Q10	Desk	-	-
Q11	Bedroom ceiling	-	-
Q12	Bedroom concealed lighting	-	-

Load/Scene name	Type of scene	Type	Controlled output
		Aux (NC)	
		AUX	
		Aux (NC)	
Foyer		1-1	Q5
Bathroom		1-1	Q6

3. Special cases:

Description	Load/Scene name	Type of scene	Type	Controlled output
I7 Button MUR	MUR		1-1	Q3
I8 Button DND	DND		1-1	Q4
Q3 Lighting Circuit MUR	MUR		Lighting Circuit	
Q4 Lighting Circuit DND	DND		Lighting Circuit	

The input/output combinations of MUR / DND are special cases.

The MUR button (call to clean the room) and the DND button (do not disturb) are already programmed (but also freely configurable). Inputs are configured as 1--1 and outputs although they are Lighting Circuits cannot participate in scenarios. The outputs will supply voltage to a 230 V indicator light on the button so that the tenant understands that he has activated them and if desired, to a second indicator light in the corridor so that the cleaning staff can see them without contacting the reception.

Finally, for the MUR button there is a preprogrammed hidden function in the long press with which the maid turns off the indicator and automatically informs the visualization that the room is cleaned (Ready).



Chameleon

Solution levels



1. Solution levels:

There are two discreet levels of implementation

1.1. As Is (no changes):

The preprogrammed solution is adequate so we can download programs to LOGO! units, using up to 9 network projects (Network_project_complete_Roomsxxtoxx.snp)

- We download programs to KNX devices.
- We request by email a visualization for the desired number (and numbering) of rooms and we install it.
- We program the Finder Opta PLC unit.

1.2. As Built (with changes):

We need to implement changes in the sensors, the circuits ans the scenes. Additionally we select which combination of Emergency Cord, MUR / DND is present in the new design (if any).

- We run the LOGO! Hotel Configurator software and it will autogerate detailed step by step instructions for programming the LOGO! units.
- A new Diagram project will be constructed based on the instructions of the previous step.
- We copy paste the new diagram project (.lsc) using up to 9 network projects as instructed.
- We batch download to the LOGO! units.
- We download program to the KNX devices.
- We request by email a visualization for the desired number (and numbering) of rooms, based on the new design and we install it.
- Along with the visualization we will receive the updated electrical drawings.
- We program the Finderr Opta PLC unit.

In the context of the **As Built** implementation, the **Design LOGO!** and **Build to Order** services are available.



Chameleon

LOGO Hotel Configurator

The Configurator is the main tool when we want to make changes to the room design. It allows for easy configuration of the sensors and the lighting circuits and upon completion it will autogenerated files both for programming and demonstrating the design with the end customer.

Configurator software will also calculate a Bill of Materials along with the type and cost of the license. There is also available an interactive guide that will provide dynamic guidance for all project steps.

Before reading the guide below, you should have read the “Basic Concepts” chapter

1. Intro screen:

In the intro page of the Configurator we can start a new design by pressing the **Start** button



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2. Parameterization of inputs and outputs:

We are guided to the basic input/output configuration page (IO settings)

LOGO! 12/24RCEO, 8DI/4DO		Description	Load/Scene name	Type of scene	Type	Controlled output	Room	+
Inputs	I1	Door Magnetic Reed Contact		Aux (NC)			Generic	
	I2	Conventional Presence Detectors		Aux			Generic	
	I3	Window Magentic Reed Contact		Aux (NC)			Generic	
	I4	Button Foyer	Foyer	1-1		Q5	Foyer	
	I5	Button Bathroom	Bathroom	1-1		Q6	Foyer	
	I6	Emergency cord	Emergency cord		Aux		Generic	
	I7	Button MUR	MUR	1-1		Q3	Foyer	
	I8	Button DND	DND	1-1		Q4	Foyer	
Outputs	Q1	Power outlets	Power outlets	General Load				
	Q2	AC on/off	AC on/off	General Load				
	Q3	Lighting Circuit MUR	MUR	Lighting Circuit				
	Q4	Lighting Circuit DND	DND	Lighting Circuit				

LOGO! DM16 24R Exp. mod, 8DI/8DO		Description	Load/Scene name	Type of scene	Type	Controlled output	Room	+
Inputs	I9	Button Balcony	Balcony	1-1		Q7	Balcony	
	I10	Button Bedside Right	Bedside Right	1-1		Q8	Bed R	
	I11	Button Bedside Leftt	Bedside Leftt	1-1		Q9	Bed L	
	I12	Button Desk	Desk	1-1		Q10	Desk	
	I13	Button scene Master On	Master On	Default	Scene		Bed L/R	
	I14	Button scene Romantic	Romantic	Default	Scene		Bed L/R	
	I15	Button scene Night	Night	Toggle	Scene		Bed L/R	
	I16	Button scene TV	TV	Default	Scene		Bed L/R	
Outputs	Q5	Lighting Circuit Foyer	Foyer	Lighting Circuit				
	Q6	Lighting Circuit Bathroom	Bathroom	Lighting Circuit				
	Q7	Lighting Circuit Balcony	Balcony	Lighting Circuit				
	Q8	Lighting Circuit Bedside Right	Bedside Right	Lighting Circuit				
	Q9	Lighting Circuit Bedside Leftt	Bedside Leftt	Lighting Circuit				
	Q10	Lighting Circuit Desk	Desk	Lighting Circuit				
Q11	Lighting Circuit Bedroom ceiling	Bedroom ceiling	Lighting Circuit					
Q12	Lighting Circuit Bedroom concealed lighting	Bedroom concealed lighting	Lighting Circuit					

Reset all
Power user
MUR/DND
MUR/DND
Main
Exit

Export project
Scenes
Sensors
LOGO! Connections
Determine LOGO!



2.1.LOGO!

In the first two columns we can find LOGO! units (base module and expansion module) and our inputs and outputs. These fields are not editable.

LOGO! 12/24RCEO, 8DI/4DO		Description	Load/Scene name	Type of scene	Type	Controlled output	Room	+
Inputs	I1	Door Magnetic Reed Contact			Aux (NC)		Generic	
	I2	Conventional Presence Detectors			Aux		Generic	
	I3	Window Magnetic Reed Contact			Aux (NC)		Generic	
	I4	Button Foyer	Foyer		1-1	Q5	Foyer	
	I5	Button Bathroom	Bathroom		1-1	Q6	Foyer	
	I6	Emergency cord	Emergency cord		Aux		Generic	
	I7	Button MUR	MUR		1-1	Q3	Foyer	
	I8	Button DND	DND		1-1	Q4	Foyer	
LOGO! DM16 24R Exp. mod, 8DI/8DO		Description	Load/Scene name	Type of scene	Type	Controlled output	Room	+
Outputs	Q1	Power outlets	Power outlets		General Load			
	Q2	AC on/off	AC on/off		General Load			
	Q3	Lighting Circuit MUR	MUR		Lighting Circuit			
	Q4	Lighting Circuit DND	DND		Lighting Circuit			
	Q5	Lighting Circuit Foyer	Foyer		Lighting Circuit			
	Q6	Lighting Circuit Bathroom	Bathroom		Lighting Circuit			
	Q7	Lighting Circuit Balcony	Balcony		Lighting Circuit			
	Q8	Lighting Circuit Bedside Right	Bedside Right		Lighting Circuit			
LOGO! 12/24RCEO, 8DI/4DO		Description	Load/Scene name	Type of scene	Type	Controlled output	Room	+
Inputs	I9	Button Balcony	Balcony	1-1	Q7	Balcony		
	I10	Button Bedside Right	Bedside Right	1-1	Q8	Bed R		
	I11	Button Bedside Leftt	Bedside Leftt	1-1	Q9	Bed L		
	I12	Button Desk	Desk	1-1	Q10	Desk		
	I13	Button scene Master On	Master On	Default	Scene		Bed L/R	
	I14	Button scene Romantic	Romantic	Default	Scene		Bed L/R	
	I15	Button scene Night	Night	Toggle	Scene		Bed L/R	
	I16	Button scene TV	TV	Default	Scene		Bed L/R	
LOGO! DM16 24R Exp. mod, 8DI/8DO		Description	Load/Scene name	Type of scene	Type	Controlled output	Room	+
Outputs	Q9	Lighting Circuit Bedside Leftt	Bedside Leftt	1-1	Q11	Bedroom		
	Q10	Lighting Circuit Desk	Desk	1-1	Q12			
	Q11	Lighting Circuit Bedroom ceiling	Bedroom ceiling		Lighting Circuit			
	Q12	Lighting Circuit Bedroom concealed lighting	Bedroom concealed lighting		Lighting Circuit			

Reset all
Power user
MUR/DND
MUR/DND
Main
Exit

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2.2.Description

In the third column we will find the names of the inputs and outputs that the program will generate automatically whenever changes are made. This field is not editable.

LOGO! 12/24RCEO, 8DI/4DO		Description	Load/Scene name	Type of scene	Type	Controlled output	Room	+
Inputs	I1	Door Magnetic Reed Contact			Aux (NC)		Generic	
	I2	Conventional Presence Detectors			Aux		Generic	
	I3	Window Magnetic Reed Contact			Aux (NC)		Generic	
	I4	Button Foyer	Foyer		1-1	Q5	Foyer	
	I5	Button Bathroom	Bathroom		1-1	Q6	Foyer	
	I6	Emergency cord	Emergency cord		Aux		Generic	
	I7	Button MUR	MUR		1-1	Q3	Foyer	
	I8	Button DND	DND		1-1	Q4	Foyer	
LOGO! DM16 24R Exp. mod, 8DI/8DO		Description	Load/Scene name	Type of scene	Type	Controlled output	Room	+
Outputs	Q1	Power outlets	Power outlets		General Load			
	Q2	AC on/off	AC on/off		General Load			
	Q3	Lighting Circuit MUR	MUR		Lighting Circuit			
	Q4	Lighting Circuit DND	DND		Lighting Circuit			
	Q5	Lighting Circuit Foyer	Foyer		Lighting Circuit			
	Q6	Lighting Circuit Bathroom	Bathroom		Lighting Circuit			
	Q7	Lighting Circuit Balcony	Balcony		Lighting Circuit			
	Q8	Lighting Circuit Bedside Right	Bedside Right		Lighting Circuit			
LOGO! 12/24RCEO, 8DI/4DO		Description	Load/Scene name	Type of scene	Type	Controlled output	Room	+
Inputs	I9	Button Balcony	Balcony	1-1	Q7	Balcony		
	I10	Button Bedside Right	Bedside Right	1-1	Q8	Bed R		
	I11	Button Bedside Leftt	Bedside Leftt	1-1	Q9	Bed L		
	I12	Button Desk	Desk	1-1	Q10	Desk		
	I13	Button scene Master On	Master On	Default	Scene		Bed L/R	
	I14	Button scene Romantic	Romantic	Default	Scene		Bed L/R	
	I15	Button scene Night	Night	Toggle	Scene		Bed L/R	
	I16	Button scene TV	TV	Default	Scene		Bed L/R	
LOGO! DM16 24R Exp. mod, 8DI/8DO		Description	Load/Scene name	Type of scene	Type	Controlled output	Room	+
Outputs	Q9	Lighting Circuit Bedside Leftt	Bedside Leftt	1-1	Q11	Bedroom		
	Q10	Lighting Circuit Desk	Desk	1-1	Q12			
	Q11	Lighting Circuit Bedroom ceiling	Bedroom ceiling		Lighting Circuit			
	Q12	Lighting Circuit Bedroom concealed lighting	Bedroom concealed lighting		Lighting Circuit			

Reset all
Power user
MUR/DND
MUR/DND
Main
Exit

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2.3. Load/Scene name

In the fourth column we can modify the names of the inputs and outputs. The first three fields and the entries in red are not editable. MUR and DND entries are a special case and will be visited in greater detail in a following paragraph.

LOGO! 12/24RCEO, 8DI/4DO		Description	Load/Scene name	Type of scene	Type	Controlled output	Room	+
Inputs	I1	Door Magnetic Reed Contact		Aux (NC)			Generic	
	I2	Conventional Presence Detectors		Aux			Generic	
	I3	Window Magntic Reed Contact		Aux (NC)			Generic	
	I4	Button Foyer	Foyer		1-1	Q5	Foyer	
	I5	Button Bathroom	Bathroom		1-1	Q6	Foyer	
	I6	Emergency cord	Emergency cord		Aux		Generic	
	I7	Button MUR	MUR		1-1	Q3	Foyer	
	I8	Button DND	DND			Q4	Foyer	
Outputs	Q1	Power outlets	Power outlets		General Load			
	Q2	AC on/off	AC on/off		General Load			
	Q3	Lighting Circuit MUR	MUR					
	Q4	Lighting Circuit DND	DND					
	Q5	Lighting Circuit Foyer	Foyer					
	Q6	Lighting Circuit Bathroom	Bathroom					
	Q7	Lighting Circuit Balcony	Balcony					
	Q8	Lighting Circuit Bedside Right	Bedside Right					
Inputs	I9	Button Balcony	Balcony					
	I10	Button Bedside Right	Bedside Right					
	I11	Button Bedside Leftt	Bedside Leftt					
	I12	Button Desk	Desk					
	I13	Button scene Master On	Master On		Default	Scene		
	I14	Button scene Romantic	Romantic		Default	Scene		
	I15	Button scene Night	Night		Toggle	Scene		
	I16	Button scene TV	TV		Default	Scene		
Outputs	Q9	Lighting Circuit Bedside Leftt	Bedside Leftt					
	Q10	Lighting Circuit Desk	Desk					
	Q11	Lighting Circuit Bedroom ceiling	Bedroom ceiling					
	Q12	Lighting Circuit Bedroom concealed lighting	Bedroom concealed lighting					

Reset all
Power user
MUR/DND
MUR/DND
Main
Exit

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2.4. Type of Scene

In the fifth column the type of scene can selected (if applicable) form a dropdown list.

LOGO! 12/24RCEO, 8DI/4DO		Description	Load/Scene name	Type of scene	Type	Controlled output	Room	+
Inputs	I1	Door Magnetic Reed Contact		Aux (NC)			Generic	
	I2	Conventional Presence Detectors		Aux			Generic	
	I3	Window Magntic Reed Contact		Aux (NC)			Generic	
	I4	Button Foyer	Foyer		1-1	Q5	Foyer	
	I5	Button Bathroom	Bathroom		1-1	Q6	Foyer	
	I6	Emergency cord	Emergency cord		Aux		Generic	
	I7	Button MUR	MUR		1-1	Q3	Foyer	
	I8	Button DND	DND			Q4	Foyer	
Outputs	Q1	Power outlets	Power outlets		General Load			
	Q2	AC on/off	AC on/off		General Load			
	Q3	Lighting Circuit MUR	MUR					
	Q4	Lighting Circuit DND	DND					
	Q5	Lighting Circuit Foyer	Foyer					
	Q6	Lighting Circuit Bathroom	Bathroom					
	Q7	Lighting Circuit Balcony	Balcony					
	Q8	Lighting Circuit Bedside Right	Bedside Right					
Inputs	I9	Button Balcony	Balcony					
	I10	Button Bedside Right	Bedside Right					
	I11	Button Bedside Leftt	Bedside Leftt					
	I12	Button Desk	Desk					
	I13	Button scene Master On	Master On		Default	Scene		
	I14	Button scene Romantic	Romantic		Default	Scene		
	I15	Button scene Night	Night		Toggle	Scene		
	I16	Button scene TV	TV		Default	Scene		
Outputs	Q9	Lighting Circuit Bedside Right	Bedside Right					
	Q10	Lighting Circuit Bedside Leftt	Bedside Leftt					
	Q11	Lighting Circuit Desk	Desk					
	Q12	Lighting Circuit Bedroom ceiling	Bedroom ceiling					
	Q13	Lighting Circuit Bedroom concealed lighting	Bedroom concealed lighting					
	Q14	Lighting Circuit Foyer	Foyer					
	Q15	Lighting Circuit Bathroom	Bathroom					
	Q16	Lighting Circuit Balcony	Balcony					

Reset all
Power user
MUR/DND
MUR/DND
Main
Exit

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The available types of scenes are Default, Bright/Dark and Toggle. This column can be populated only if the input type is set to Scene.

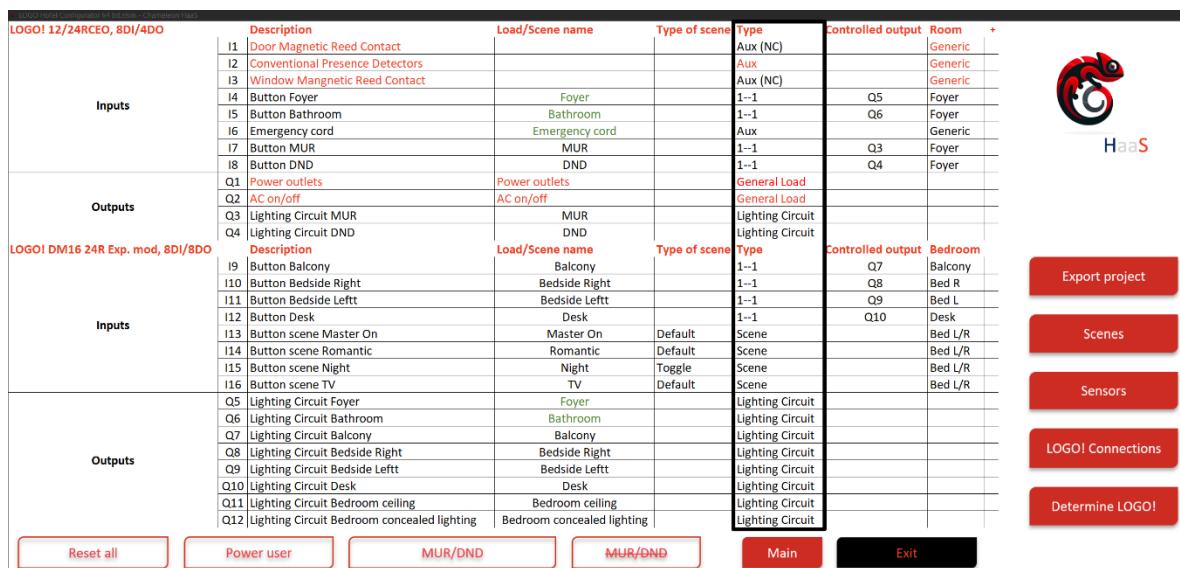
Description	Load/Scene name	Type of scene	Type
I9 Button Balcony	Balcony		1--1
I10 Button Bedside Right	Bedside Right		1--1
I11 Button Bedside Leftt	Bedside Leftt		1--1
I12 Button Desk	Desk		1--1
I13 Button scene Master On	Master On	Default	Scene
I14 Button scene Romantic	Romantic	Default Bright/Dark Toggle	Scene
I15 Button scene Night	Night	Toggle	Scene

If the input is set to Scene and no Scene type is selected, the field will turn red until a selection is made.

Description	Load/Scene name	Type of scene	Type
I9 Button Balcony	Balcony		1--1
I10 Button Bedside Right	Bedside Right		1--1
I11 Button Bedside Leftt	Bedside Leftt		1--1
I12 Button Desk	Desk		1--1
I13 Button scene Master On	Master On		Scene
I14 Button scene Romantic	Romantic	Default	Scene
I15 Button scene Night	Night	Toggle	Scene
I16 Button scene TV	TV	Default	Scene

2.5. Type

In the sixth column we will select the type of input and output.



LOGO! 12/24RCEO, 8DI/4DO							
Inputs	I1 Door Magnetic Reed Contact	Description	Load/Scene name	Type of scene	Type	Controlled output	Room
	I2 Conventional Presence Detectors				Aux (NC)		Generic
	I3 Window Mangnetic Reed Contact				Aux		Generic
	I4 Button Foyer	Foyer			1--1	Q5	Foyer
	I5 Button Bathroom	Bathroom			1--1	Q6	Foyer
	I6 Emergency cord	Emergency cord			Aux		Generic
	I7 Button MUR	MUR			1--1	Q3	Foyer
	I8 Button DND	DND			1--1	Q4	Foyer
	Q1 Power outlets	Power outlets			General Load		
Q2 AC on/off	AC on/off			General Load			
Q3 Lighting Circuit MUR	MUR			Lighting Circuit			
Q4 Lighting Circuit DND	DND			Lighting Circuit			
LOGO! DM16 24R Exp. mod., 8DI/8DO							
Inputs	I9 Button Balcony	Description	Load/Scene name	Type of scene	Type	Controlled output	Room
	I10 Button Bedside Right	Bedside Right			1--1	Q7	Balcony
	I11 Button Bedside Leftt	Bedside Leftt			1--1	Q8	Bed R
	I12 Button Desk	Desk			1--1	Q9	Bed L
	I13 Button scene Master On	Master On	Default	Scene		Q10	Desk
	I14 Button scene Romantic	Romantic	Default	Scene			Bed L/R
	I15 Button scene Night	Night	Toggle	Scene			Bed L/R
	I16 Button scene TV	TV	Default	Scene			Bed L/R
	Q5 Lighting Circuit Foyer	Foyer			Lighting Circuit		
Q6 Lighting Circuit Bathroom	Bathroom			Lighting Circuit			
Q7 Lighting Circuit Balcony	Balcony			Lighting Circuit			
Q8 Lighting Circuit Bedside Right	Bedside Right			Lighting Circuit			
Q9 Lighting Circuit Bedside Leftt	Bedside Leftt			Lighting Circuit			
Q10 Lighting Circuit Desk	Desk			Lighting Circuit			
Q11 Lighting Circuit Bedroom ceiling	Bedroom ceiling			Lighting Circuit			
Q12 Lighting Circuit Bedroom concealed lighting	Bedroom concealed lighting			Lighting Circuit			

If we do not wish to utilize an input or output we can select the field and press Delete on our keyboard.

The available options for inputs are 1--1, Aux and Scene ("Basic concepts" chapter).

Type	Controlled output
Aux (NC)	
Aux	
Aux (NC)	
1--1	Q5
1--1	Q6
Aux	
Aux	
1--1	Q3
1--1	Q4



The available options for outputs are General Load and Lighting Circuit (“Basic concepts” chapter).

Description	Load/Scene name	Type of scene	Type	Controlled output
I9 Button Balcony	Balcony		1-1	Q7
I10 Button Bedside Right	Bedside Right		1-1	Q8
I11 Button Bedside Leftt	Bedside Leftt		1-1	Q9
I12 Button Desk	Desk		1-1	Q10
I13 Button scene Master On	Master On	Default	Scene	
I14 Button scene Romantic	Romantic	Default	Scene	
I15 Button scene Night	Night	Toggle	Scene	
I16 Button scene TV	TV	Default	Scene	
Q5 Lighting Circuit Foyer	Foyer		Lighting Circuit	
Q6 Lighting Circuit Bathroom	Bathroom		Lighting Circuit	

We can also configure the Door and Window magnetic contacts as normally closed or open (NC/NO).

Description	Load/Scene name	Type of scene	Type	C
I1 Door Magnetic Reed Contact				Aux (NC)
I2 Conventional Presence Detectors				AUX
I3 Window Mangnetic Reed Contact				Aux (NC)
I4 Button Foyer	Foyer			Aux (NC) Aux (NO)

2.6. Controlled output

In the seventh column, the controlled output can be selected (“Basic concepts” chapter). This column can be populated only for 1—1 inputs.

LOGO! 12/24RCIO, 8DI/4DO						
	Description	Load/Scene name	Type of scene	Type	Controlled output	Room
Inputs	I1 Door Magnetic Reed Contact				Aux (NC)	Generic
	I2 Conventional Presence Detectors				Aux	Generic
	I3 Window Mangnetic Reed Contact				Aux (NC)	Generic
	I4 Button Foyer	Foyer		1-1	Q5	Foyer
	I5 Button Bathroom	Bathroom		1-1	Q6	Bathroom
	I6 Emergency cord	Emergency cord		Aux		
	I7 Button MUR	MUR		1-1	Q3	Foyer
	I8 Button DND	DND		1-1	Q4	Foyer
Outputs	Q1 Power outlets	Power outlets		General Load		
	Q2 AC on/off	AC on/off		General Load		
	Q3 Lighting Circuit MUR	MUR		Lighting Circuit		
	Q4 Lighting Circuit DND	DND		Lighting Circuit		
	LOGO! DM16 24R Exp. mod., 8DI/8DO	I9 Button Balcony	Balcony	1-1	Q7	Balcony
		I10 Button Bedside Right	Bedside Right	1-1	Q8	Bed R
		I11 Button Bedside Leftt	Bedside Leftt	1-1	Q9	Bed L
		I12 Button Desk	Desk	1-1	Q10	Desk
I13 Button scene Master On		Master On	Default	Scene		Bed L/R
I14 Button scene Romantic		Romantic	Default	Scene		Bed L/R
I15 Button scene Night		Night	Toggle	Scene		Bed L/R
I16 Button scene TV		TV	Default	Scene		Bed L/R
Inputs	Q5 Lighting Circuit Foyer	Foyer		Lighting Circuit		
	Q6 Lighting Circuit Bathroom	Bathroom		Lighting Circuit		
	Q7 Lighting Circuit Balcony	Balcony		Lighting Circuit		
	Q8 Lighting Circuit Bedside Right	Bedside Right		Lighting Circuit		
	Q9 Lighting Circuit Bedside Leftt	Bedside Leftt		Lighting Circuit		
	Q10 Lighting Circuit Desk	Desk		Lighting Circuit		
	Q11 Lighting Circuit Bedroom ceiling	Bedroom ceiling		Lighting Circuit		
	Q12 Lighting Circuit Bedroom concealed lighting	Bedroom concealed lighting		Lighting Circuit		
Reset all		Power user	MUR/DND	MUR/DND	Main	Exit

If an input is 1—1 type and no controlled input is selected, the field will turn red until a selection is made.

Description	Load/Scene name	Type of scene	Type	Controlled output
I1 Door Magnetic Reed Contact				Aux (NC)
I2 Conventional Presence Detectors				Aux
I3 Window Mangnetic Reed Contact				Aux (NC)
I4 Button Foyer	Foyer		1--1	Q5
I5 Button Bathroom	Bathroom		1--1	
I6 Emergency cord	Emergency cord		Aux	

The dropdown list of available outputs is dynamic and will only be populated by unused outputs.

Description	Load/Scene name	Type of scene	Type	Controlled output
I1 Door Magnetic Reed Contact				Aux (NC)
I2 Conventional Presence Detectors				Aux
I3 Window Mangnetic Reed Contact				Aux (NC)
I4 Button Foyer	Foyer		1--1	Q5
I5 Button Bathroom	Bathroom		1--1	
I6 Emergency cord	Emergency cord		Aux	Q6 Q11 Q12
I7 Button MUR	MUR		1--1	Q5

2.7. Room

In the eighth column, the placement of sensor can be configured whether it is 1–1 or Scene .

LOGO! 12/24RCEO, 8DI/4DO		Description	Load/Scene name	Type of scene	Type	Controlled output	Room
Inputs	I1	Door Magnetic Reed Contact			Aux (NC)		Generic
	I2	Conventional Presence Detectors			Aux		Generic
	I3	Window Mangnetic Reed Contact			Aux (NC)		Generic
	I4	Button Foyer	Foyer	1--1		Q5	Foyer
	I5	Button Bathroom	Bathroom	1--1		Q6	Foyer
	I6	Emergency cord	Emergency cord		Aux		Generic
	I7	Button MUR	MUR	1--1		Q3	Foyer
	I8	Button DND	DND	1--1		Q4	Foyer
LOGO! DM16 24R Exp. mod., 8DI/8DO							
Outputs	Q1	Power outlets	Power outlets		General Load		
	Q2	AC on/off	AC on/off		General Load		
	Q3	Lighting Circuit MUR	MUR		Lighting Circuit		
	Q4	Lighting Circuit DND	DND		Lighting Circuit		
	I9	Button Balcony	Balcony	1--1		Q7	Balcony
	I10	Button Bedside Right	Bedside Right	1--1		Q8	Bed R
	I11	Button Bedside Leftt	Bedside Leftt	1--1		Q9	Bed L
	I12	Button Desk	Desk	1--1		Q10	Desk
Inputs	I13	Button scene Master On	Master On	Default	Scene		Bed L/R
	I14	Button scene Romantic	Romantic	Default	Scene		Bed L/R
	I15	Button scene Night	Night	Toggle	Scene		Bed L/R
	I16	Button scene TV	TV	Default	Scene		Bed L/R
	O5	Lighting Circuit Foyer	Foyer		Lighting Circuit		
	O6	Lighting Circuit Bathroom	Bathroom		Lighting Circuit		
	O7	Lighting Circuit Balcony	Balcony		Lighting Circuit		
	O8	Lighting Circuit Bedside Right	Bedside Right		Lighting Circuit		
Outputs	O9	Lighting Circuit Bedside Leftt	Bedside Leftt		Lighting Circuit		
	O10	Lighting Circuit Desk	Desk		Lighting Circuit		
	O11	Lighting Circuit Bedroom ceiling	Bedroom ceiling		Lighting Circuit		
	O12	Lighting Circuit Bedroom concealed lighting	Bedroom concealed lighting		Lighting Circuit		

Buttons at the bottom: Reset all, Power user, MUR/DND, MUR/DND, Main, Exit.

The available options are:

Description	Load/Scene name	Type of scene	Type	Controlled output	Room
I1 Door Magnetic Reed Contact			Aux (NC)		Generic
I2 Conventional Presence Detectors			Aux		Generic
I3 Window Mangnetic Reed Contact			Aux (NC)		Generic
I4 Button Foyer	Foyer	1--1		Q5	Foyer
I5 Button Bathroom	Bathroom	1--1		Q6	WC
I6 Emergency cord	Emergency cord		Aux		Desk
I7 Button MUR	MUR	1--1		Q3	Bed L
I8 Button DND	DND	1--1		Q4	Bed R
I9 Button Balcony	Balcony				Bed L/R
I10 Button Bedside Right	Bedside Right				Balcony
I11 Button Bedside Leftt	Bedside Leftt				Bedroom
I12 Button Desk	Desk				Generic

Foyer

WC

Desk

Bed L: Left bedside

Bed R: Right bedside

Bed L/R: Bedside left and right (wired in parallel to one LOGO input !)

Balcony

Bedroom: Additional placement option

Generic: Input is not a sensor, but an Aux

If the input type is Aux , the program will choose Generic Room and will not allow us to make another choice.

If an input is converted from type Aux to 1--1, the room field will turn red until a placement is selected (other than Generic).

Description	Load/Scene name	Type of scene	Type	Controlled output	Room
I1 Door Magnetic Reed Contact			Aux (NC)		Generic
I2 Conventional Presence Detectors			Aux		Generic
I3 Window Mangnetic Reed Contact			Aux (NC)		Generic
I4 Button Foyer	Foyer	1--1		Q5	Foyer
I5 Button Bathroom	Bathroom	1--1		Q6	Foyer
I6 Button Emergency cord	Emergency cord	1--1			Generic

Similarly, If an input is converted from type Aux to Scene, the room field will turn red until a placement is selected (other than Generic).

Description	Load/Scene name	Type of scene	Type	Controlled output	Room
I1 Door Magnetic Reed Contact			Aux (NC)		Generic
I2 Conventional Presence Detectors			Aux		Generic
I3 Window Mangnetic Reed Contact			Aux (NC)		Generic
I4 Button Foyer	Foyer	1--1		Q5	Foyer
I5 Button Bathroom	Bathroom	1--1		Q6	Foyer
I6 Button scene Emergency cord	Emergency cord	Scene			Generic

Finally, for an input of type 1--1 or Scene if the Room field is empty, the Room field will turn red until a placement is selected.

Description	Load/Scene name	Type of scene	Type	Controlled output	Room
I1 Door Magnetic Reed Contact			Aux (NC)		Generic
I2 Conventional Presence Detectors			Aux		Generic
I3 Window Mangnetic Reed Contact			Aux (NC)		Generic
I4 Button Foyer	Foyer	1--1		Q5	Red

2.8.+

In the ninth and final column, an additional sensor placement can be selected for 1--1 control or a Scene for activation from another location with a parallel cable connection.



LOGO! 12/24RCEO, 8DI/4DO		Description	Load/Scene name	Type of scene	Type	Controlled output	Room	
Inputs	I1	Door Magnetic Reed Contact			Aux (NC)		Generic	
	I2	Conventional Presence Detectors			Aux		Generic	
	I3	Window Mangnetic Reed Contact			Aux (NC)		Generic	
	I4	Button Foyer	Foyer	1--1		Q5	Foyer	
	I5	Button Bathroom	Bathroom	1--1		Q6	Foyer	
	I6	Emergency cord	Emergency cord	Aux			Generic	
	I7	Button MUR	MUR	1--1		Q3	Foyer	
	I8	Button DND	DND	1--1		Q4	Foyer	
Outputs	Q1	Power outlets	Power outlets	General Load				
	Q2	AC on/off	AC on/off	General Load				
	Q3	Lighting Circuit MUR	MUR	Lighting Circuit				
	Q4	Lighting Circuit DND	DND	Lighting Circuit				
	Inputs	I9	Button Balcony	Balcony	1--1		Q7	Balcony
		I10	Button Bedside Right	Bedside Right	1--1		Q8	Bed R
		I11	Button Bedside Leftt	Bedside Leftt	1--1		Q9	Bed L
		I12	Button Desk	Desk	1--1		Q10	Desk
I13		Button scene Master On	Master On	Default	Scene		Bed L/R	
I14		Button scene Romantic	Romantic	Default	Scene		Bed L/R	
I15		Button scene Night	Night	Toggle	Scene		Bed L/R	
I16		Button scene TV	TV	Default	Scene		Bed L/R	
Outputs	Q5	Lighting Circuit Foyer	Foyer	Lighting Circuit				
	Q6	Lighting Circuit Bathroom	Bathroom	Lighting Circuit				
	Q7	Lighting Circuit Balcony	Balcony	Lighting Circuit				
	Q8	Lighting Circuit Bedside Right	Bedside Right	Lighting Circuit				
	Q9	Lighting Circuit Bedside Leftt	Bedside Leftt	Lighting Circuit				
	Q10	Lighting Circuit Desk	Desk	Lighting Circuit				
	Q11	Lighting Circuit Bedroom ceiling	Bedroom ceiling	Lighting Circuit				
	Q12	Lighting Circuit Bedroom concealed lighting	Bedroom concealed lighting	Lighting Circuit				

Buttons at the bottom: Reset all, Power user, MUR/DND, MUR/DND, Main, Exit.

Available options are:

Foyer

WC

Desk

Balcony

Bedroom: Additional placement option

Description	Load/Scene name	Type of scene	Type	Controlled output	Room	+
I1	Door Magnetic Reed Contact			Aux (NC)		Generic
I2	Conventional Presence Detectors			Aux		Generic
I3	Window Mangnetic Reed Contact			Aux (NC)		Generic
I4	Button Foyer	Foyer	1--1		Q5	Foyer
I5	Button Bathroom	Bathroom	1--1		Q6	Foyer
I6	Emergency cord	Emergency cord	Aux			Generic
I7	Button MUR	MUR	1--1		Q3	Foyer

The program will not allow to select the same sensor placement (preceding adjacent cell), or a sensor placement that does not exist in the previous column (Room). Finally, if the Room field is empty, the program will delete any entries in +.

3. Sequence of tasks:

LOGO! 12/24RCEO, 8DI/4DO

	Description	Load/Scene name	Type of scene	Type	Controlled output	Room	+
I1	Door Magnetic Reed Contact		Aux (NC)			Generic	
I2	Conventional Presence Detectors	6	Aux	1	2	Generic	4
I3	Window Magentic Reed Contact		Aux (NC)			Generic	
I4	Button Foyer	Foyer			Q5	Foyer	
I5	Button Bathroom	Bathroom			Q6	Foyer	
I6	Emergency cord	Emergency cord					
I7	Button MUR	MUR					
I8	Button DND	DND					
Q1	Power outlets	Power outlets					
Q2	AC on/off	AC on/off					
Q3	Lighting Circuit MUR	MUR					
Q4	Lighting Circuit DND	DND					

LOGO! DM16 24R Exp. mod, 8DI/8DO

	Description	Load/Scene name	Type of scene	Type	Controlled output	Room
I9	Button Balcony	Balcony	1-1		Q7	Balcony
I10	Button Bedside Right	Bedside Right	1-1		Q8	Bed R
I11	Button Bedside Leftt	Bedside Leftt	1-1		Q9	Bed L
I12	Button Desk	Desk	Default	Scene	Q10	Desk
I13	Button scene Master On	Master On	Default	Scene		Bed L/R
I14	Button scene Romantic	Romantic	Default	Scene		Bed L/R
I15	Button scene Night	Night	Toggle	Scene		Bed L/R
I16	Button scene TV	TV	Default	Scene		Bed L/R
Q5	Lighting Circuit Foyer	Foyer				
Q6	Lighting Circuit Bathroom	Bathroom				
Q7	Lighting Circuit Balcony	Balcony				
Q8	Lighting Circuit Bedside Right	Bedside Right				
Q9	Lighting Circuit Bedside Leftt	Bedside Leftt				
Q10	Lighting Circuit Desk	Desk				
Q11	Lighting Circuit Bedroom ceiling	Bedroom ceiling				
Q12	Lighting Circuit Bedroom concealed lighting	Bedroom concealed lighting				

Buttons:

- Reset all
- Power user
- MUR/DND
- MUR/DND
- Main
- Exit

Buttons (right side):

- Export project
- Scenes
- Sensors
- LOGO! Connections
- Determine LOGO!

Steps:

1. Change of input/output → type
2. Selection of Controlled output / 3. Selection of Scene type (red fields will indicate the required action, if any) →
5. Choice of placement (Room) (red fields will indicate mandatory actions, if any) →
- (4).Optional) second placent option + →
- 6.Load/Scene name changes

4. Error checking:

4.1. Visual inspection

After design completion no red fields should exist. Confirme that sensor placement is desirable (Room, +).

4.2. Automatic fault detection

Press the Determine LOGO! button

LOGO! 12/24RCEO, 8DI/4DO

	Description	Load/Scene name	Type of scene	Type	Controlled output	Room	+
I1	Door Magnetic Reed Contact		Aux (NC)			Generic	
I2	Conventional Presence Detectors		Aux			Generic	
I3	Window Magentic Reed Contact		Aux (NC)			Generic	
I4	Button Foyer	Foyer	1-1		Q5	Foyer	
I5	Button Bathroom	Bathroom	1-1		Q6	Foyer	
I6	Emergency cord	Emergency cord	Aux				
I7	Button MUR	MUR	1-1		Q3	Foyer	
I8	Button DND	DND	1-1		Q4	Foyer	
Q1	Power outlets	Power outlets					
Q2	AC on/off	AC on/off					
Q3	Lighting Circuit MUR	MUR					
Q4	Lighting Circuit DND	DND					

LOGO! DM16 24R Exp. mod, 8DI/8DO

	Description	Load/Scene name	Type of scene	Type	Controlled output	Room
I9	Button Balcony	Balcony	1-1		Q7	Balcony
I10	Button Bedside Right	Bedside Right	1-1		Q8	Bed R
I11	Button Bedside Leftt	Bedside Leftt	1-1		Q9	Bed L
I12	Button Desk	Desk	1-1		Q10	Desk
I13	Button scene Master On	Master On	Default	Scene		Bed L/R
I14	Button scene Romantic	Romantic	Default	Scene		Bed L/R
I15	Button scene Night	Night	Toggle	Scene		Bed L/R
I16	Button scene TV	TV	Default	Scene		Bed L/R
Q5	Lighting Circuit Foyer	Foyer				
Q6	Lighting Circuit Bathroom	Bathroom				
Q7	Lighting Circuit Balcony	Balcony				
Q8	Lighting Circuit Bedside Right	Bedside Right				
Q9	Lighting Circuit Bedside Leftt	Bedside Leftt				
Q10	Lighting Circuit Desk	Desk				
Q11	Lighting Circuit Bedroom ceiling	Bedroom ceiling				
Q12	Lighting Circuit Bedroom concealed lighting	Bedroom concealed lighting				

Buttons:

- Reset all
- Power user
- MUR/DND
- MUR/DND
- Main
- Exit

Buttons (right side):

- Export project
- Scenes
- Sensors
- LOGO! Connections
- Determine LOGO!



The program will crosscheck for all 1--1 type inputs, if the Controlled output bears the same name with the input. In the following example it will check and confirm, for example, that the I4 input and the Q5 Controlled output have the same name (Foyer).

LOGO! 12/24RCEO, 8DI/4DO

	Description	Load/Scene name	Type of scene	Type	Controlled output	Room
Inputs	I1 Door Magnetic Reed Contact	Foyer	Aux (NC)	Aux	Q5	Generic
	I2 Conventional Presence Detectors		Aux			Generic
	I3 Window Mangnetic Reed Contact		Aux (NC)			Generic
	I4 Button Foyer	Foyer	1-1	Q5	Foyer	
	I5 Button Bathroom	Bathroom	1-1	Q6	Foyer	
	I6 Emergency cord	Emergency cord	Aux			Generic
	I7 Button MUR	MUR	1-1	Q3	Foyer	
	I8 Button DND	DND	1-1	Q4	Foyer	
Outputs	Q1 Power outlets	Power outlets	General Load			
	Q2 AC on/off	AC on/off	General Load			
	Q3 Lighting Circuit MUR	MUR	Lighting Circuit			
	Q4 Lighting Circuit DND	DND	Lighting Circuit			

LOGO! DM16 24R Exp. mod., 8DI/8DO

	Description	Load/Scene name	Type of scene	Type	Controlled output	Bedroom
Inputs	I9 Button Balcony	Balcony	1-1	Q7	Balcony	
	I10 Button Bedside Right	Bedside Right	1-1	Q8	Bed R	
	I11 Button Bedside Leftt	Bedside Leftt	1-1	Q9	Bed L	
	I12 Button Desk	Desk	1-1	Q10	Desk	
	I13 Button scene Master On	Master On	Default	Scene	Bed L/R	
	I14 Button scene Romantic	Romantic	Default	Scene	Bed L/R	
	on/off Button scene Night	Night	Toggle	Scene	Bed L/R	
	I15 Button scene TV	TV	Default	Scene	Bed L/R	
Outputs	Q5 Lighting Circuit Foyer	Foyer	Lighting Circuit			
	Q6 Lighting Circuit Bathroom	Bathroom	Lighting Circuit			
	Q7 Lighting Circuit Balcony	Balcony	Lighting Circuit			
	Q8 Lighting Circuit Bedside Right	Bedside Right	Lighting Circuit			
	Q9 Lighting Circuit Bedside Leftt	Bedside Leftt	Lighting Circuit			
	Q10 Lighting Circuit Desk	Desk	Lighting Circuit			
	Q11 Lighting Circuit Bedroom ceiling	Bedroom ceiling	Lighting Circuit			
	Q12 Lighting Circuit Bedroom concealed lighting	Bedroom concealed lighting	Lighting Circuit			

Main Exit

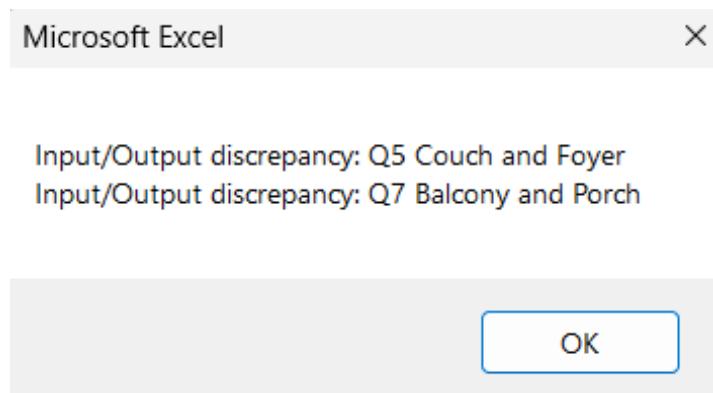
Buttons: Reset all, Power user, MUR/DND, MUR/DND.

Icons: Export project, Scenes, Sensors, LOGO! Connections, Determine LOGO!

If no relevant error is detected the following popup will appear. Press OK to exit.



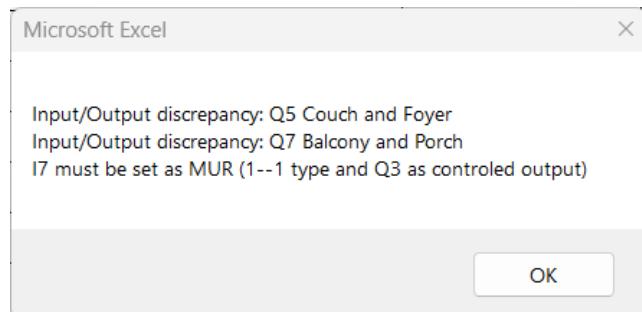
On error, the message will give us the output (Qx) and the mismatched names. In the example below, the Q5 has the names Couch and Foyer and the Q7 the names Balcony and Porch.



Press OK and correct either the name of the input or the output. Run the **Determine LOGO !** diagnostic again to confirm.

LOGO! 12/24RCEO, 8DI/4DO		Description	Load/Scene name	Type of scene	Type	Controlled output	Room	+
Inputs	I1	Door Magnetic Reed Contact			Aux (NC)		Generic	
	I2	Conventional Presence Detectors			Aux		Generic	
	I3	Window Magnetic Reed Contact			Aux (NC)		Generic	
	I4	Button Foyer	Foyer		1--1	Q5	Foyer	
	I5	Button Bathroom	Bathroom		1--1	Q6	Foyer	
	I6	Emergency cord	Emergency cord		Aux		Generic	
	I7	Button MUR	MUR		1--1	Q3	Foyer	
	I8	Button DND	DND		1--1	Q4	Foyer	
Outputs	Q1	Power outlets	Power outlets		General Load			
	Q2	AC on/off	AC on/off		General Load			
	Q3	Lighting Circuit MUR	MUR		Lighting Circuit			
	Q4	Lighting Circuit DND	DND		Lighting Circuit			
LOGO! DM16 24R Exp. mod, 8DI/8DO		Description	Load/Scene name	Type of scene	Type	Controlled output	Room	+
Inputs	I9	Button Porch	Porch		1--1	Q7	Balcony	
	I10	Button Bedside Right	Bedside Right		1--1	Q8	Bed R	
	I11	Button Bedside Leftt	Bedside Leftt			Q9	Bed L	
	I12	Button Desk	Desk			Q10	Desk	
	I13	Button scene Master On	Master On	Def	Input/Output discrepancy: Q5 Couch and Foyer Input/Output discrepancy: Q7 Balcony and Porch			
	I14	Button scene Romantic	Romantic	Def	Input/Output discrepancy: Q5 Couch and Foyer Input/Output discrepancy: Q7 Balcony and Porch			
	I15	Button scene Night	Night	Top	Input/Output discrepancy: Q5 Couch and Foyer Input/Output discrepancy: Q7 Balcony and Porch			
	I16	Button scene TV	TV	Defaut	Input/Output discrepancy: Q5 Couch and Foyer Input/Output discrepancy: Q7 Balcony and Porch			
Outputs	Q5	Lighting Circuit Couch	Couch		Lighting Circuit			
	Q6	Lighting Circuit Bathroom	Bathroom		Lighting Circuit			
	Q7	Lighting Circuit Balcony	Balcony		Lighting Circuit			
	Q8	Lighting Circuit Bedside Right	Bedside Right		Lighting Circuit			
	Q9	Lighting Circuit Bedside Leftt	Bedside Leftt		Lighting Circuit			
	Q10	Lighting Circuit Desk	Desk		Lighting Circuit			
	Q11	Lighting Circuit Bedroom ceiling	Bedroom ceiling		Lighting Circuit			
	Q12	Lighting Circuit Bedroom concealed lighting	Bedroom concealed lighting		Lighting Circuit			

The automatic fault detection, apart from the 1--1 type crosscheck, will also check for errors in the configuration of the MUR/DND functions, giving precise instructions for restoring the functionality.



Correct errors per instructions.

Both Visual inspection and Automatic fault detection will be either way be carried out by the program upon pressing the **Scenes** or **Sensors** buttons, to prevent generating errors. If errors are detected, you will not be allowed to access the two aforementioned pages.

5. MUR/DND:

MUR / DND (input/output) functions are a special case and if we want to use them they must remain at the **output Q 3 and Q 4**. The corresponding buttons at the bottom of the page allow us to remove and restore both at the same time

LOGO! 12/24RCEO, 8DI/4DO		Description	Load/Scene name	Type of scene	Type	Controlled output	Room	+
Inputs	I1	Door Magnetic Reed Contact			Aux (NC)		Generic	
	I2	Conventional Presence Detectors			Aux		Generic	
	I3	Window Mangnetic Reed Contact			Aux (NC)		Generic	
	I4	Button Foyer	Foyer		1--1	Q5	Foyer	
	I5	Button Bathroom	Bathroom		1--1	Q6	Foyer	
	I6	Emergency cord	Emergency cord		Aux		Generic	
	I7	Button MUR	MUR		1--1	Q3	Foyer	
	I8	Button DND	DND		1--1	Q4	Foyer	

LOGO! DM16 24R Exp. mod, 8DI/8DO		Description	Load/Scene name	Type of scene	Type	Controlled output	Bedroom	+
Inputs	I9	Button Balcony	Balcony		1--1	Q7	Balcony	
	I10	Button Bedside Right	Bedside Right		1--1	Q8	Bed R	
	I11	Button Bedside Leftt	Bedside Leftt		1--1	Q9	Bed L	
	I12	Button Desk	Desk		1--1	Q10	Desk	
	I13	Button scene Master On	Master On	Default	Scene		Bed L/R	
	I14	Button scene Romantic	Romantic	Default	Scene		Bed L/R	
	I15	Button scene Night	Night	Toggle	Scene		Bed L/R	
	I16	Button scene TV	TV	Default	Scene		Bed L/R	

Outputs		Description	Load/Scene name	Type of scene	Type	Controlled output	Bedroom	+
Outputs	Q5	Lighting Circuit Foyer	Foyer		Lighting Circuit			
	Q6	Lighting Circuit Bathroom	Bathroom		Lighting Circuit			
	Q7	Lighting Circuit Balcony	Balcony		Lighting Circuit			
	Q8	Lighting Circuit Bedside Right	Bedside Right		Lighting Circuit			
	Q9	Lighting Circuit Bedside Leftt	Bedside Leftt		Lighting Circuit			
	Q10	Lighting Circuit Desk	Desk		Lighting Circuit			
	Q11	Lighting Circuit Bedroom ceiling	Bedroom ceiling	✓	Lighting Circuit			
	Q12	Lighting Circuit Bedroom concealed lighting	Bedroom concealed lighting	✗	Lighting Circuit			

Reset all
Power user
MUR/DND
MUR/DND
Main
Exit

Export project
Scenes
Sensors
LOGO! Connections
Determine LOGO!

If we wish to delete only one of the two, we select the two corresponding fields and press Delete.

Description	Load/Scene name	Type of scene	Type	Controlled output
I7 Button MUR	MUR		1--1	Q3
I8 Button			1--1	Q4
Q1 Power outlets	Power outlets		General Load	
Q2 AC on/off	AC on/off		General Load	
Q3 Lighting Circuit MUR	MUR		Lighting Circuit	
Q4 Lighting Circuit			Lighting Circuit	

6. Reset Loads:

If we wish to start the design again from the beginning, we press the **Reset all** button and everything is initialized to its default settings.

Reset all

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7. New design from scratch:

If we wish to make extensive changes, we press the **Power User** button at the bottom and all descriptions are deleted.

LOGO! 12/24RCCEO, 8DI/4DO		Description	Load/Scene name	Type of scene	Type	Controlled output	Room	*
Inputs	I1	Door Magnetic Reed Contact			Aux (NC)		Generic	
	I2	Conventional Presence Detectors			Aux		Generic	
	I3	Window Magnetic Reed Contact			Aux (NC)		Generic	
	I4	Button Foyer	Foyer		1-1	Q5	Foyer	
	I5	Button Bathroom	Bathroom		1-1	Q6	Foyer	
	I6	Emergency cord	Emergency cord		Aux		Generic	
	I7	Button MUR	MUR		1-1	Q3	Foyer	
	I8	Button DND	DND		1-1	Q4	Foyer	
Outputs	Q1	Power outlets	Power outlets		General Load			
	Q2	AC on/off	AC on/off		General Load			
	Q3	Lighting Circuit MUR	MUR		Lighting Circuit			
	Q4	Lighting Circuit DND	DND		Lighting Circuit			
LOGO! DM16 24R Exp. mod, 8DI/8DO		Description	Load/Scene name	Type of scene	Type	Controlled output	Room	
Inputs	I9	Button Balcony	Balcony		1-1	Q7	Balcony	
	I10	Button Bedside Right	Bedside Right		1-1	Q8	Bed R	
	I11	Button Bedside Leftt	Bedside Leftt		1-1	Q9	Bed L	
	I12	Button Desk	Desk		1-1	Q10	Desk	
	I13	Button scene Master On	Master On	Default	Scene		Bed L/R	
	I14	Button scene Romantic	Romantic	Default	Scene		Bed L/R	
	I15	Button scene Night	Night	Toggle	Scene		Bed L/R	
	I16	Button scene TV	TV	Default	Scene		Bed L/R	
Outputs	Q5	Lighting Circuit Foyer	Foyer		Lighting Circuit			
	Q6	Lighting Circuit Bathroom	Bathroom		Lighting Circuit			
	Q7	Lighting Circuit Balcony	Balcony		Lighting Circuit			
	Q8	Lighting Circuit Bedside Right	Bedside Right		Lighting Circuit			
	Q9	Lighting Circuit Bedside Leftt	Bedside Leftt		Lighting Circuit			
	Q10	Lighting Circuit Desk	Desk		Lighting Circuit			
Q11	Lighting Circuit Bedroom ceiling	Bedroom ceiling		Lighting Circuit				
Q12	Lighting Circuit Bedroom concealed lighting	Bedroom concealed lighting		Lighting Circuit				

Reset all
Power user
MUR/DND
MUR/DND
Main
Exit

 HaaS
Export project
Scenes
Sensors
LOGO! Connections
Determine LOGO!

Erase or retain MUR/DND functionality and follow again the steps as described **Sequence of Tasks** paragraph.

Steps:

1. Change of input/output → **type**
2. Selection of **Controlled output** / 3. Selection of **Scene type** (red fields will indicate the required action, if any)→
5. Choice of placement (**Room**) (red fields will indicate mandatory actions, if any)→
- (4).(Optional) second placent option + →
- 6.Load/Scene name **changes**

After design completion run error checking again.

8. LOGO! Connections (Optional):

After completing the new design of the room without **errors**, we can proceed to the next steps. At this point, if we wish, we can see the connections of the LOGO! units by pressing the **LOGO! Connections** button. This page will autogenerate and print even if we do not navigate to it.



LOGO! 12/24RCEO, 8DI/4DO

	Description	Load/Scene name	Type of scene	Type	Controlled output	Room	+
I1	Door Magnetic Reed Contact			Aux (NC)		Generic	
I2	Conventional Presence Detectors			Aux		Generic	
I3	Window Magnetic Reed Contact			Aux (NC)		Generic	
I4	Button Foyer	Foyer		1-1	Q5	Foyer	
I5	Button Bathroom	Bathroom		1-1	Q6	Foyer	
I6	Emergency cord	Emergency cord		Aux		Generic	
I7	Button MUR	MUR		1-1	Q3	Foyer	
I8	Button DND	DND		1-1	Q4	Foyer	

LOGO! DM16 24R Exp. mod., 8DI/8DO

	Description	Load/Scene name	Type of scene	Type	Controlled output	Room	+
I9	Button Balcony	Balcony		1-1	Q7	Balcony	
I10	Button Bedside Right	Bedside Right		1-1	Q8	Bed R	
I11	Button Bedside Leftt	Bedside Leftt		1-1	Q9	Bed L	
I12	Button Desk	Desk		1-1	Q10	Desk	
I13	Button scene Master On	Master On	Default	Scene		Bed L/R	
I14	Button scene Romantic	Romantic	Default	Scene		Bed L/R	
I15	Button scene Night	Night	Toggle	Scene		Bed L/R	
I16	Button scene TV	TV	Default	Scene		Bed L/R	

Outputs

	Description	Load/Scene name	Type of scene	Type	Controlled output	Room	+
Q5	Lighting Circuit Foyer	Foyer		Lighting Circuit			
Q6	Lighting Circuit Bathroom	Bathroom		Lighting Circuit			
Q7	Lighting Circuit Balcony	Balcony		Lighting Circuit			
Q8	Lighting Circuit Bedside Right	Bedside Right		Lighting Circuit			
Q9	Lighting Circuit Bedside Leftt	Bedside Leftt		Lighting Circuit			
Q10	Lighting Circuit Desk	Desk		Lighting Circuit			
Q11	Lighting Circuit Bedroom ceiling	Bedroom ceiling		Lighting Circuit			
Q12	Lighting Circuit Bedroom concealed lighting	Bedroom concealed lighting		Lighting Circuit			

Buttons

Inputs

Outputs

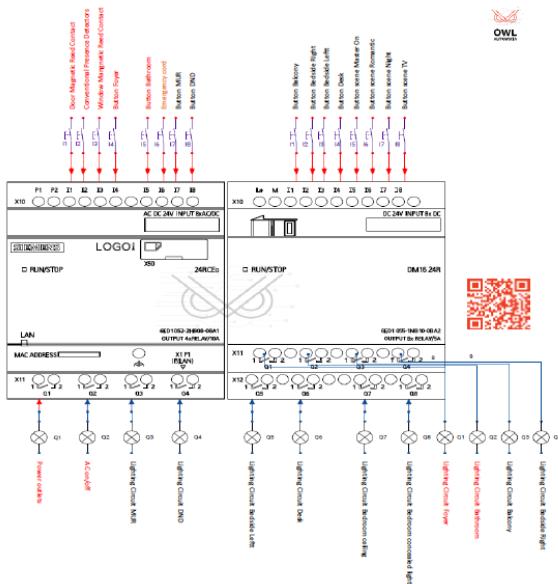
Scenes

Sensors

LOGO! Connections

Determine LOGO!

Reset all **Power user** **MUR/DND** **MUR/DND** **Main** **Exit**



9. Sensors:

Press the **Sensors** button



The screenshot shows a software interface for managing sensor configurations across two LOGO! models: LOGO! 12/24RCEO, 8DI/4DO and LOGO! DM16 24R Exp. mod., 8DI/8DO. The interface includes tables for inputs and outputs, with detailed descriptions, load/scene names, type of scene, controlled output, and room assignments. Buttons at the bottom include 'Reset all', 'Power user', 'MUR/DND', 'MUR/DND' (highlighted in red), 'Main', and 'Exit'. To the right, a vertical stack of buttons is shown: 'Export project', 'Scenes' (highlighted in red), 'Sensors' (highlighted in red), 'LOGO! Connections', and 'Determine LOGO!'.

LOGO! 12/24RCEO, 8DI/4DO		Description	Load/Scene name	Type of scene	Type	Controlled output	Room
Inputs	I1	Door Magnetic Reed Contact			Aux (NC)		Generic
	I2	Conventional Presence Detectors			Aux		Generic
	I3	Window Magnetic Reed Contact			Aux (NC)		Generic
	I4	Button Foyer	Foyer		1-1	Q5	Foyer
	I5	Button Bathroom	Bathroom		1-1	Q6	Foyer
	I6	Emergency cord	Emergency cord		Aux		Generic
	I7	Button MUR	MUR		1-1	Q3	Foyer
	I8	Button DND	DND		1-1	Q4	Foyer
Outputs	Q1	Power outlets	Power outlets		General Load		
	Q2	AC on/off	AC on/off		General Load		
	Q3	Lighting Circuit MUR	MUR		Lighting Circuit		
	Q4	Lighting Circuit DND	DND		Lighting Circuit		

LOGO! DM16 24R Exp. mod., 8DI/8DO		Description	Load/Scene name	Type of scene	Type	Controlled output	Bedroom
Inputs	I9	Button Balcony	Balcony	1-1	Q7	Balcony	
	I10	Button Bedside Right	Bedside Right	1-1	Q8	Bed R	
	I11	Button Bedside Leftt	Bedside Leftt	1-1	Q9	Bed L	
	I12	Button Desk	Desk	1-1	Q10	Desk	
	I13	Button scene Master On	Master On	Default	Scene		Bed L/R
	I14	Button scene Romantic	Romantic	Default	Scene		Bed L/R
	I15	Button scene Night	Night	Toggle	Scene		Bed L/R
	I16	Button scene TV	TV	Default	Scene		Bed L/R
Outputs	Q5	Lighting Circuit Foyer	Foyer		Lighting Circuit		
	Q6	Lighting Circuit Bathroom	Bathroon		Lighting Circuit		
	Q7	Lighting Circuit Balcony	Balcony		Lighting Circuit		
	Q8	Lighting Circuit Bedside Right	Bedside Right		Lighting Circuit		
Q9	Lighting Circuit Bedside Leftt	Bedside Leftt		Lighting Circuit			
Q10	Lighting Circuit Desk	Desk		Lighting Circuit			
Q11	Lighting Circuit Bedroom ceiling	Bedroom ceiling		Lighting Circuit			
Q12	Lighting Circuit Bedroom concealed lighting	Bedroom concealed lighting		Lighting Circuit			

and navigate to the Sensors page where a table has formed with the sensor names and their corresponding pages.

Foyer	Foyer	Bathroom	MUR	DND
Balcony	Balcony			
Bed R	Bedside Right	Romantic	Master On	Night
Bed L	Bedside Leftt	Romantic	Master On	Night
Desk	Couch			

Visualize **Reset** **Back**

Press the **Visualize** button, a schematic is created with the sensor placement in red boxes and the sensor buttons in grey to help to end customer to form an understanding of the design.

Foyer	Foyer	Bathroom	MUR	DND
Balcony	Balcony			
Bed R	Bedside Right	Romantic	Master On	Night
Bed L	Bedside Leftt	Romantic	Master On	Night
Desk	Couch			

Visualize **Reset** **Back**



Press the **Reset** button, to delete the schematic, in case we do not want to print it.

Foyer	Foyer	Bathroom	MUR	DND
Balcony	Balcony			
Bed R	Bedside Right	Romantic	Master On	Night
Bed L	Bedside Leftt	Romantic	Master On	Night
Desk	Couch			

Visualize **Reset** **Back**

In addition, other passive elements can be added (not LOGO inputs !) to the sensor buttons such as sockets, USB , RJ45, HDMI etc. , simply by writing in the adjacent fields.



Press again the **Visualize** button, to generate again the sensor schematic. The added passive elements will now also appear.

Foyer	Foyer	Bathroom	MUR	DND			
Balcony	Balcony						
Bed R	Bedside Right	Romantic	Master On	Night	Porch	USB	Schuko
Bed L	Bedside Left	Romantic	Master On	Night	Porch	USB	Schuko
Desk	Couch						

After completing sensor design press the **Back** button to return to the main.

10. Cables

In the Sensors page by pressing the **Cables** button, we can navigate to the Cables screen.

Foyer	Foyer	Bathroom	MUR	DND	
Balcony	Balcony				
Bed R	Bedside Right	Master On	Romantic	Night	TV
Bed L	Bedside Left	Master On	Romantic	Night	TV
Desk	Desk				

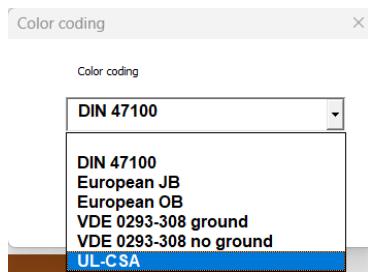


In the Cables screen, we can see that the program based on the design has grouped inputs per sensor location.

The screenshot shows the 'Cables' screen of the LOGO! Hotel Configurator software. On the left, there is a table listing various sensor locations (Foyer, Bathroom, MUR, DND, Common, Balcony, Bed R, Bed L, Desk, Door, Window) along with their corresponding LOGO! model numbers (I4, I5, I7, I8, Common, I9, I10, I11, I13, I14, I15, I16, I11, I12, I13, Common), core counts (Nr of cores), and core colors (e.g., White, Brown, Green, Yellow, Grey). A yellow frame highlights the 'DIN 47100' color coding section at the top right. A black frame groups the first five rows (Foyer, Bathroom, MUR, DND, Common) together. An orange frame highlights the core numbers (1-5) in the 'Core' column. To the right of the table, there are three buttons: 'Color coding' (highlighted by a yellow frame), 'Back', and 'Help'. Below the table, there are six small color-coded squares corresponding to the core colors: White, Brown, Green, Yellow, Grey, and Pink.

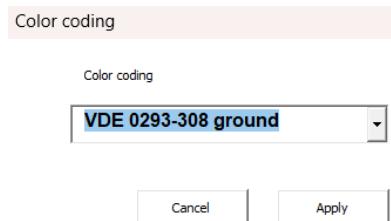
For instance, in Foyer sensor position, Foyer, Bathroom, MUR and DND have been grouped together (see black frame). So, a five-core (Common has been added) cable from Foyer sensor to LOGO! has been calculated. Connection points in LOGO! and sensor assembly are also illustrated (see red frame). Core cables are numbered (see orange frame) and color coded as per DIN 47100 in this example (see yellow frame).

By pressing the **Color** coding button, we can choose from all possible color codings.



Available options are DIN 47100, European OB, European JB, VDE 0293-308 with ground cable, VDE 0293-308 without ground cable and UL-CSA.

Select the color coding you want and press Apply (or Cancel to abort operation).





The cables are now given with the chosen color scheme.

The screenshot shows a table of components and their corresponding cable color codes. To the right of the table are color swatches and numbered boxes (1-5) indicating the core colors for each component. The components listed include Foyer, Bathroom, MUR, DND, Common, Balcony, Bed R, Desk, Door, Window, and various control contacts. The color coding table shows the core number, color, and reference number for each component.

	LOGO!	Nr of cores		
Foyer	I4	Core	1 green	GN yellow YE
Bathroom	I5	Core	2 grey	GY
MUR	I7	Core	3 black	BK
DND	I8	Core	4 brown	BN
Common	Common	Core	5 blue	BU
Balcony	I9	Core	1 brown	BN
Common	Common	Core	2 blue	BU
Bed R	LOGO!	Nr of cores	6	
Bedside Right	I10	Core	1 green	GN yellow YE
Master On	I13	Core	2 black	BK
Romantic	I14	Core	3 black	BK
Night	I15	Core	4 black	BK
TV	I16	Core	5 black	BK
Common	Common	Core	6 black	BK
Bed L	LOGO!	Nr of cores	6	
Bedside Left	I11	Core	1 green	GN yellow YE
Master On	I13	Core	2 black	BK
Romantic	I14	Core	3 black	BK
Night	I15	Core	4 black	BK
TV	I16	Core	5 black	BK
Common	Common	Core	6 black	BK
Desk	LOGO!	Nr of cores	2	
Desk	I12	Core	1 brown	BN
Common	Common	Core	2 blue	BU
Door	LOGO!	Nr of cores	2	
Door Magnetic Reed Contact	I1	Core	1 brown	BN
Common	Common	Core	2 blue	BU
Window	LOGO!	Nr of cores	2	
Window Magnetic Reed Contact	I3	Core	1 brown	BN
Common	Common	Core	2 blue	BU

In this example we can see that for a six core cable we have a green/yellow core and five black cables with numbers (which can be seen next to the color strip). Configuring this page will allow to get a quick calculation of all control cables and provide with a color coded guide for wiring.

11. Scenes:

Having completed the sensor design, press the **Scenes** button.

The screenshot shows the 'Scenes' configuration screen. It displays two tables of scenes and their controlled outputs. On the right side, there are several red buttons: 'Export project', 'Scenes' (which is highlighted), 'Sensors', 'LOGO! Connections', and 'Determine LOGO!'. At the bottom are buttons for 'Reset all', 'Power user', 'MUR/DND', 'MUR/DND', 'Main', and 'Exit'.

LOGO! 12/24RCEO, 8DI/4DO		Description	Load/Scene name	Type of scene	Type	Controlled output	Room
Inputs	I1	Door Magnetic Reed Contact			Aux (NC)		Generic
	I2	Conventional Presence Detectors			Aux		Generic
	I3	Window Magnetic Reed Contact			Aux (NC)		Generic
	I4	Button Foyer	Foyer		1-1	Q5	Foyer
	I5	Button Bathroom	Bathroom		1-1	Q6	Foyer
	I6	Emergency cord	Emergency cord			Aux	
	I7	Button MUR	MUR		1-1	Q3	Foyer
	I8	Button DND	DND		1-1	Q4	Foyer
Outputs	Q1	Power outlets	Power outlets		General Load		
	Q2	AC on/off	AC on/off		General Load		
	Q3	Lighting Circuit MUR	MUR		Lighting Circuit		
	Q4	Lighting Circuit DND	DND		Lighting Circuit		
	I9	Button Balcony	Balcony		1-1	Q7	Balcony
	I10	Button Bedside Right	Bedside Right		1-1	Q8	Bed R
	I11	Button Bedside Leftt	Bedside Leftt		1-1	Q9	Bed L
	I12	Button Desk	Desk		1-1	Q10	Desk
LOGO! DM16 24R Exp. mod, 8DI/8DO	I13	Button scene Master On	Master On	Default	Scene		Bed L/R
	I14	Button scene Romantic	Romantic	Default	Scene		Bed L/R
	I15	Button scene Night	Night	Toggle	Scene		Bed L/R
	I16	Button scene TV	TV	Default	Scene		Bed L/R
	Q5	Lighting Circuit Foyer	Foyer		Lighting Circuit		
	Q6	Lighting Circuit Bathroom	Bathroom		Lighting Circuit		
	Q7	Lighting Circuit Balcony	Balcony		Lighting Circuit		
	Q8	Lighting Circuit Bedside Right	Bedside Right		Lighting Circuit		
Q9	Lighting Circuit Bedside Leftt	Bedside Leftt		Lighting Circuit			
Q10	Lighting Circuit Desk	Desk		Lighting Circuit			
Q11	Lighting Circuit Bedroom ceiling	Bedroom ceiling		Lighting Circuit			
Q12	Lighting Circuit Bedroom concealed lighting	Bedroom concealed lighting		Lighting Circuit			

LOGO! 12/24RCEO, 8DI/4DO		Description	Load/Scene name	Type of scene	Type	Controlled output	Room
Inputs	I1	Door Magnetic Reed Contact			Aux (NC)		Generic
	I2	Conventional Presence Detectors			Aux		Generic
	I3	Window Magnetic Reed Contact			Aux (NC)		Generic
	I4	Button Foyer	Foyer		1-1	Q5	Foyer
	I5	Button Bathroom	Bathroom		1-1	Q6	Foyer
	I6	Emergency cord	Emergency cord			Aux	
	I7	Button MUR	MUR		1-1	Q3	Foyer
	I8	Button DND	DND		1-1	Q4	Foyer
Outputs	Q1	Power outlets	Power outlets		General Load		
	Q2	AC on/off	AC on/off		General Load		
	Q3	Lighting Circuit MUR	MUR		Lighting Circuit		
	Q4	Lighting Circuit DND	DND		Lighting Circuit		
	I9	Button Balcony	Balcony		1-1	Q7	Balcony
	I10	Button Bedside Right	Bedside Right		1-1	Q8	Bed R
	I11	Button Bedside Leftt	Bedside Leftt		1-1	Q9	Bed L
	I12	Button Desk	Desk		1-1	Q10	Desk
LOGO! DM16 24R Exp. mod, 8DI/8DO	I13	Button scene Master On	Master On	Default	Scene		Bed L/R
	I14	Button scene Romantic	Romantic	Default	Scene		Bed L/R
	I15	Button scene Night	Night	Toggle	Scene		Bed L/R
	I16	Button scene TV	TV	Default	Scene		Bed L/R
	Q5	Lighting Circuit Foyer	Foyer		Lighting Circuit		
	Q6	Lighting Circuit Bathroom	Bathroom		Lighting Circuit		
	Q7	Lighting Circuit Balcony	Balcony		Lighting Circuit		
	Q8	Lighting Circuit Bedside Right	Bedside Right		Lighting Circuit		
Q9	Lighting Circuit Bedside Leftt	Bedside Leftt		Lighting Circuit			
Q10	Lighting Circuit Desk	Desk		Lighting Circuit			
Q11	Lighting Circuit Bedroom ceiling	Bedroom ceiling		Lighting Circuit			
Q12	Lighting Circuit Bedroom concealed lighting	Bedroom concealed lighting		Lighting Circuit			

On the popup screen press the **Skip** button

Scenes' Values

Circuits with changed name will be highlighted in grey. If you check them, they will retain the scene values and will only be renamed. If you uncheck a circuit with no name change, scene values will be deleted. Press apply to enforce changes, or Skip to get the default behavior, where a changed name does not retain scene values.

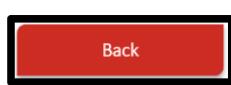
Previous circuit	New circuit	Retain scenes
Foyer	Foyer	<input checked="" type="checkbox"/>
Bathroom	Bathroom	<input checked="" type="checkbox"/>
Balcony	Balcony	<input checked="" type="checkbox"/>
Bedside Right	Bedside Right	<input checked="" type="checkbox"/>
Bedside Left	Bedside Left	<input checked="" type="checkbox"/>
Desk	Couch	<input type="checkbox"/>
Bedroom ceiling	Bedroom ceiling	<input checked="" type="checkbox"/>
Bedroom concealed lighting	Bedroom concealed lighting	<input checked="" type="checkbox"/>



and navigate to Scenes page

LOGO Hotel Configurator 64 bit.xlsx - Chameleon Haas

Scenarios	7	Welcome Guest	Guest Out	Master On	Romantic	Night	Night (Toggle)	TV
Circuits		Oc Guest In	Oc Guest Out	I13 (Out)	I14 (Out)	I15 (Out)	I15 (Toggle)	I16 (Out)
Q5	Foyer	+	-		-	-	+	-
Q6	Bathroom	+	-	+		-	-	
Q7	Balcony		-		-	-	-	
Q8	Bedside Right		-		-	-	-	
Q9	Bedside Leftt		-		-	-	-	
Q10	Desk		-		-	-	-	+
Q11	Bedroom ceiling		-	+	-	-	-	
Q12	Bedroom concealed lighting		-	+	+	-	-	+



Fill in the table with +, – or blanks (press Delete on the keyboard, to leave a field empty) ("Basic concepts" chapter). We have the choice either to fill in the fields, or print the blank Scenes Template page. In this case the prints can be filled by the end customer without using the software.

Entering the page, for any unchanged inputs/outputs the fields will be filled with their presets.

It is worth noting that the Scenes page is dynamic. So we can navigate back to the main page and change the design of the room. Returning to the Scenes page, the program has kept in its memory the values we have entered (+, -) and will restore them, leaving any fields affected by the changes we have made, empty to fill in.

In the following example Scenes **Romantic** and **Master On** were swapped in inputs I13 and I14, **TV** scene has been renamed to **Porch** and finally the **Desk** sensor and circuit were renamed to **Couch**.



LOGO! 12/24RCEO, 8DI/4DO		Description	Load/Scene name	Type of scene	Type	Controlled output	Room	+
Inputs	I1	Door Magnetic Reed Contact			Aux (NC)		Generic	
	I2	Conventional Presence Detectors			Aux		Generic	
	I3	Window Magnetic Reed Contact			Aux (NC)		Generic	
	I4	Button Foyer	Foyer		1-1	Q5	Foyer	
	I5	Button Bathroom	Bathroom		1-1	Q6	Foyer	
	I6	Emergency cord	Emergency cord		Aux		Generic	
	I7	Button MUR	MUR		1-1	Q3	Foyer	
	I8	Button DND	DND		1-1	Q4	Foyer	
Outputs	Q1	Power outlets	Power outlets		General Load			
	Q2	AC on/off	AC on/off		General Load			
	Q3	Lighting Circuit MUR	MUR		Lighting Circuit			
	Q4	Lighting Circuit DND	DND		Lighting Circuit			
LOGO! DM16 24R Exp. mod, 8DI/8DO		Description	Load/Scene name	Type of scene	Type	Controlled output	Bedroom	
Inputs	I9	Button Balcony	Balcony		1-1	Q7	Balcony	
	I10	Button Bedside Right	Bedside Right		1-1	Q8	Bed R	
	I11	Button Bedside Leftt	Bedside Leftt		1-1	Q9	Bed L	
	I12	Button Couch	Couch		1-1	Q10	Desk	
	I13	Button scene Romantic	Romantic	Default	Scene		Bed L/R	
	I14	Button scene Master On	Master On	Default	Scene		Bed L/R	
	I15	Button scene Night	Night	Toggle	Scene		Bed L/R	
	I16	Button scene Porch	Porch	Default	Scene		Bed L/R	
Outputs	Q5	Lighting Circuit Foyer	Foyer		Lighting Circuit			
	Q6	Lighting Circuit Bathroom	Bathroom		Lighting Circuit			
	Q7	Lighting Circuit Balcony	Balcony		Lighting Circuit			
	Q8	Lighting Circuit Bedside Right	Bedside Right		Lighting Circuit			
	Q9	Lighting Circuit Bedside Leftt	Bedside Leftt		Lighting Circuit			
	Q10	Lighting Circuit Couch	Couch		Lighting Circuit			
	Q11	Lighting Circuit Bedroom ceiling	Bedroom ceiling		Lighting Circuit			
	Q12	Lighting Circuit Bedroom concealed lighting	Bedroom concealed lighting		Lighting Circuit			

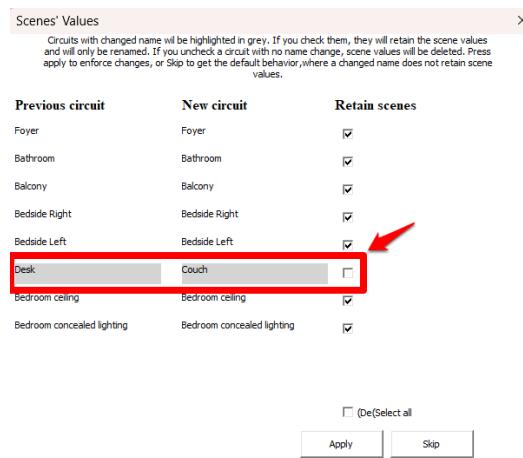
Scenarios	7	Welcome Guest	Guest Out	Master On	Romantic	Night	Night (Toggle)	TV
Circuits		Oc Guest In	Oc Guest Out	I13 (Out)	I14 (Out)	I15 (Out)	I15 (Toggle)	I16 (Out)
Q5	Foyer	+	-		-	-	+	-
Q6	Bathroom	+	-	+		-	-	
Q7	Balcony	-			-	-	-	
Q8	Bedside Right	-			-	-	-	
Q9	Bedside Leftt	-			-	-	-	
Q10	Desk	-			-	-	-	+
Q11	Bedroom ceiling	-		+	-	-	-	-
Q12	Bedroom concealed lighting	-		+	+	-	-	+

Scenarios	7	Welcome Guest	Guest Out	Romantic	Master On	Night	Night (Toggle)	Porch
Circuits		Oc Guest In	Oc Guest Out	I13 (Out)	I14 (Out)	I15 (Out)	I15 (Toggle)	I16 (Out)
Q5	Foyer	+	-	-		-	+	
Q6	Bathroom	+	-		+	-	-	
Q7	Balcony	-		-		-	-	
Q8	Bedside Right	-		-		-	-	
Q9	Bedside Leftt	-		-		-	-	
Q10	Couch							
Q11	Bedroom ceiling	-		-	+	-	-	
Q12	Bedroom concealed lighting	-		+	+	-	-	

Romantic and Master On scenes have retained their values, even though we have transposed inputs. The Porch scene and Couch circuit though, which didn't exist before, are left blank to fill.

11.1 Advanced Scenes' configuration (Scene Values)

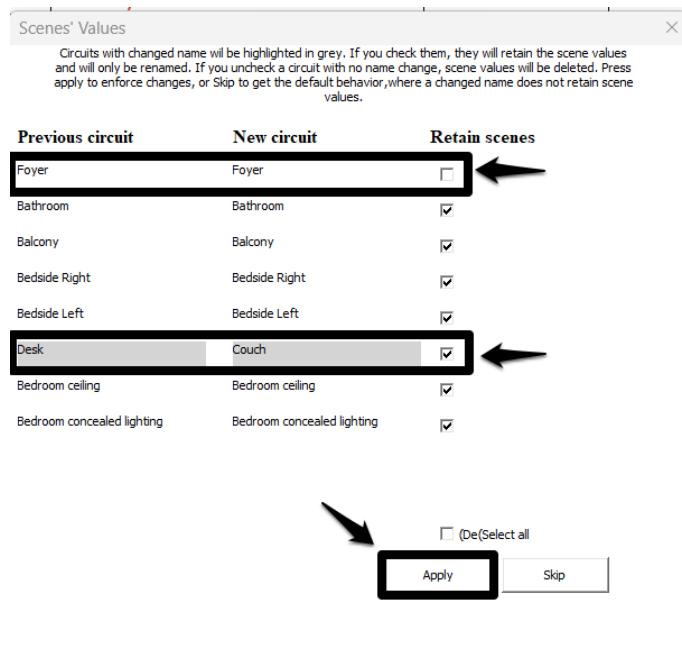
Alternatively, instead of pressing **Skip** on the Scenes' Values popup window we could perform some more advanced functions.



All circuits with a changed name will be highlighted in grey (in this case we can see the Couch circuit which used to be the Desk circuit). The first column (marked Previous circuit) contains all the circuits we had before we did any changes. In the second column (marked New circuit) we can see the new circuit names after our changes. In the third column we can see a Retain scenes option. If this option is checked, the new load will retain the scene values from the Desk circuit.

By default circuits with no name change will be already checked and circuits with a changed name will be unchecked. If we want the default scene functionality described above we can either press **Skip** or **Apply**, without changing the checkboxes' presets.

However, you can opt to tweak the checkboxes. For example, we want the Couch circuit to retain the scene values from the Desk circuit but want to do a new scene setting to Foyer. We can configure the popup as follows and press **Apply**.



As we can see below Foyer is now a blank scene to fill. In the same time, Couch has retained its scene values from the Desk circuit.

Scenarios	7	Welcome Guest	Guest Out	Master On	Romantic	Night	Night (Toggle)	Reading
Circuits		Oc Guest In	Oc Guest Out	I13 (Out)	I14 (Out)	I15 (Out)	I15 (Toggle)	I16 (Out)
Q5	Foyer							
Q6	Bathroom	+	-	+		-	-	
Q7	Balcony		-		-	-	-	
Q8	Bedside Right		-		-	-	-	
Q9	Bedside Left		-		-	-	-	
Q10	Couch		-		-	-	-	
Q11	Bedroom ceiling		-	+	-	-	-	
Q12	Bedroom concealed lighting		-	+	+	-	-	

CircuitGuide:

After completing scenes design press the Back button to navigate to the main screen.

LOGO Hotel Configurator C4-bitLism - Chameleon Haas

Scenarios	7	Welcome Guest	Guest Out	Master On	Romantic	Night	Night (Toggle)	TV
Circuits		Oc Guest In	Oc Guest Out	I13 (Out)	I14 (Out)	I15 (Out)	I15 (Toggle)	I16 (Out)
Q5	Foyer	+	-	-	-	+	-	
Q6	Bathroom	+	-	+	-	-	-	
Q7	Balcony		-	-	-	-	-	
Q8	Bedside Right		-	-	-	-	-	
Q9	Bedside Leftt		-	-	-	-	-	
Q10	Desk		-	-	-	-	+	
Q11	Bedroom ceiling		-	+	-	-	-	
Q12	Bedroom concealed lighting		-	+	+	-	-	+

Back

12. Export Project:

Press the **Export Project** button

LOGO! 12/24RCEO, 8DI/4DO		Description	Load/Scene name	Type of scene	Type	Controlled output	Room	+	
Inputs	I1	Door Magnetic Reed Contact			Aux (NC)		Generic		
	I2	Conventional Presence Detectors			Aux		Generic		
	I3	Window Mangnetic Reed Contact			Aux (NC)		Generic		
	I4	Button Foyer	Foyer		1-1	Q5	Foyer		
	I5	Button Bathroom	Bathroom		1-1	Q6	Foyer		
	I6	Emergency cord	Emergency cord		Aux		Generic		
	I7	Button MUR	MUR		1-1	Q3	Foyer		
	I8	Button DND	DND		1-1	Q4	Foyer		
Outputs	Q1	Power outlets	Power outlets		General Load				
	Q2	AC on/off	AC on/off		General Load				
	Q3	Lighting Circuit MUR	MUR		Lighting Circuit				
	Q4	Lighting Circuit DND	DND		Lighting Circuit				
	LOGO! DM16 24R Exp. mod, 8DI/8DO	I9	Button Balcony	Balcony		1-1	Q7	Balcony	
		I10	Button Bedside Right	Bedside Right		1-1	Q8	Bed R	
		I11	Button Bedside Leftt	Bedside Leftt		1-1	Q9	Bed L	
		I12	Button Desk	Desk		1-1	Q10	Des	
I13		Button scene Master On	Master On	Default	Scene		Bed L/R		
I14		Button scene Romantic	Romantic	Default	Scene		Bed L/R		
I15		Button scene Night	Night	Toggle	Scene		Bed L/R		
I16		Button scene TV	TV	Default	Scene		Bed L/R		
Outputs	Q5	Lighting Circuit Foyer	Foyer		Lighting Circuit				
	Q6	Lighting Circuit Bathroom	Bathroom		Lighting Circuit				
	Q7	Lighting Circuit Balcony	Balcony		Lighting Circuit				
	Q8	Lighting Circuit Bedside Right	Bedside Right		Lighting Circuit				
	Q9	Lighting Circuit Bedside Leftt	Bedside Leftt		Lighting Circuit				
	Q10	Lighting Circuit Desk	Desk		Lighting Circuit				
	Q11	Lighting Circuit Bedroom ceiling	Bedroom ceiling		Lighting Circuit				
	Q12	Lighting Circuit Bedroom concealed lighting	Bedroom concealed lighting		Lighting Circuit				



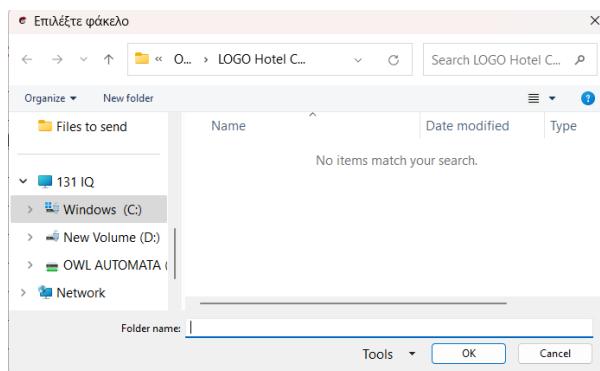
Haas

Export project
Scenes
Sensors
LOGO! Connections
Determine LOGO!

Reset all
Power user
MUR/DND
MUR/DND
Main
Exit

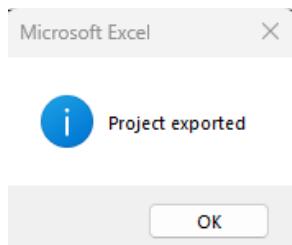


A popup window will allow to select a save location for the generated files.



If no file location is selected, the procedure will be aborted.

When the export process is finished, press OK on the popup window



Press the **Exit** button if you wish to terminate the program

The screenshot shows a software interface for managing LOGO! connections. On the left, there are two tables: one for LOGO! 12/24RCEO, 8DI/4DO and another for LOGO! DM16 24R Exp. mod., 8DI/8DO. The tables list various inputs and outputs with their descriptions, load/scene names, types, controlled outputs, and room assignments. On the right, there are several red buttons: 'Export project', 'Scenes', 'Sensors', 'LOGO! Connections', and 'Determine LOGO!'. At the bottom, there are buttons for 'Reset all', 'Power user', 'MUR/DND', 'MUR/DND', 'Main', and 'Exit' (which is highlighted with a red arrow).

LOGO! 12/24RCEO, 8DI/4DO					
	Description	Load/Scene name	Type of scene	Type	Controlled output
Inputs	I1 Door Magnetic Reed Contact			Aux (NC)	
	I2 Conventional Presence Detectors			Aux	
	I3 Window Magnetic Reed Contact			Aux (NC)	
	I4 Button Foyer	Foyer		1-1	Q5
	I5 Button Bathroom	Bathroom		1-1	Q6
	I6 Emergency cord	Emergency cord		Aux	
	I7 Button MUR	MUR		1-1	Q3
	I8 Button DND	DND		1-1	Q4
LOGO! DM16 24R Exp. mod., 8DI/8DO					
	Description	Load/Scene name	Type of scene	Type	Controlled output
Inputs	I9 Button Balcony	Balcony		1-1	Q7
	I10 Button Bedside Right	Bedside Right		1-1	Q8
	I11 Button Bedside Leftt	Bedside Leftt		1-1	Q9
	I12 Button Desk	Desk		1-1	Q10
	I13 Button scene Master On	Master On	Default	Scene	
	I14 Button scene Romantic	Romantic	Default	Scene	
	I15 Button scene Night	Night	Toggle	Scene	
	I16 Button scene TV	TV	Default	Scene	
Outputs	O5 Lighting Circuit Foyer	Foyer		Lighting Circuit	
	O6 Lighting Circuit Bathroom	Bathroom		Lighting Circuit	
	O7 Lighting Circuit Balcony	Balcony		Lighting Circuit	
	O8 Lighting Circuit Bedside Right	Bedside Right		Lighting Circuit	
	O9 Lighting Circuit Bedside Leftt	Bedside Leftt		Lighting Circuit	
	O10 Lighting Circuit Desk	Desk		Lighting Circuit	
	O11 Lighting Circuit Bedroom ceiling	Bedroom ceiling		Lighting Circuit	
	O12 Lighting Circuit Bedroom concealed lighting	Bedroom concealed lighting		Lighting Circuit	

In the chosen save location we can find the files that were generated upon pressing the **Export Project** button

 Cables.pdf			Adobe Acrobat	115 KB
 Circuits.pdf			Adobe Acrobat	89 KB
 Connections.pdf			Adobe Acrobat	150 KB
 IO Setting.pdf			Adobe Acrobat	191 KB
 LOGO Hotel Configurator 64 bit ...			Microsoft Excel	4 KB
 LOGO! instructions.txt			Text Document	1 KB
 Scenes.pdf			Adobe Acrobat	146 KB
 Sensors.pdf			Adobe Acrobat	128 KB

The following files have been produced in pdf files

IO setting: Main page

Cables: Buying and color coded wiring guide for control cables

Connections: The LOGO ! connections (for wiring a test unit or to be placed as quick reference in the room's consumer unit)

Circuits: Graphical file of programming LOGO!

Scenes: The scenarios we created

Sensors: Our sensors (with or without schematic, at our option)

LOGO Hotel Configurator LOGO! import.csv: File that we will import into the diagrams of LOGO ! to update the LOGO ! Soft Comfort with the new name of the inputs and outputs (see "LOGO! Diagram program" guide).

LOGO! instructions: The file will guide us on the Diagram (. lsc) and Network (..snp) files we need to use to reprogram LOGO !. If reprogramming of LOGO ! is required, in the same file we will find step-by-step detailed instructions, as in the example below:

Select UDF Oc

Select pin Guest In

Right click (Connect with input connector...) on the pin and write *Q5

Select Set

Right click (Connect with input connector...) on the pin and write *Q6

Select Set

Select UDF Oc

Select pin Guest Out

Right click (Connect with input connector...) on the pin and write *Q5

Select Unset

Right click (Connect with input connector...) on the pin and write *Q6

Select Unset

Right click (Connect with input connector...) on the pin and write *Q7

Select Unset

Right click (Connect with input connector...) on the pin and write *Q8

Select Unset

Right click (Connect with input connector...) on the pin and write *Q9

Select Unset

Right click (Connect with input connector...) on the pin and write *Q10

Select Unset

Right click (Connect with input connector...) on the pin and write *Q11

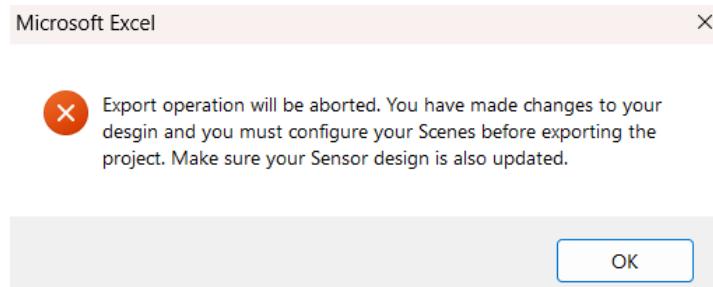
Select Unset

Right click (Connect with input connector...) on the pin and write *Q12

Select Unset

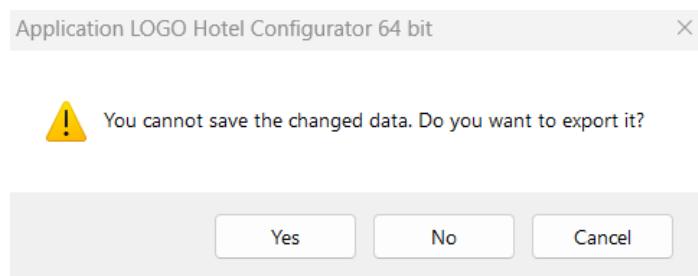


If we have made changes in the IO Setting page and we have not configured the Scenes, we will receive an error message (seen below) and the operation will be aborted.



13. Project export

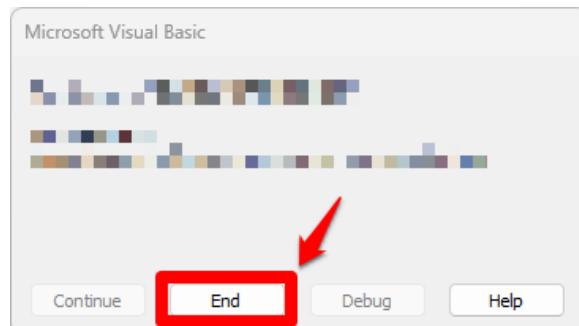
Upon pressing the **Export Project** or the **Exit** button there is the option to save the project. Selecting **Yes** will export the project configuration and **No** will discard any changes made. The software produces a .dat file with the user configuration. This file can later be imported to make further changes.



Upon pressing **Yes** a save file dialog will pop up for the .dat file.

14. Errors:

If an error occurs press the **End** button at the popup window

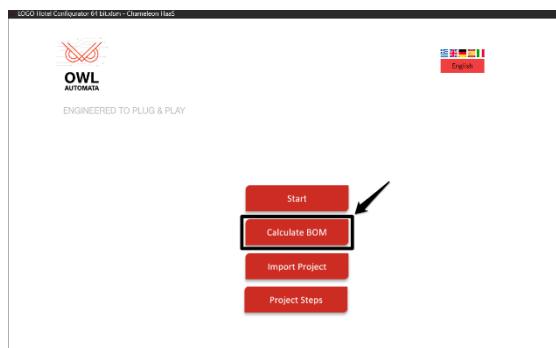


Exit the Configurator from the **X** control in top right corner



15. BOM Calculation

In the intro page there is a **Calculate BOM** button



Press the button and in the popup form fill all fields as follows:

Bill Of Materials calculation

Rooms:	<input type="text"/>	KNX lines:	<input type="text"/>
New hotel?	<input type="checkbox"/>	Existing rooms:	<input type="text"/>
Brightness sensor?	<input type="checkbox"/>	Existing KNX lines:	<input type="text"/>
Technical support?	<input type="checkbox"/>	Aidoo type: <input type="text"/>	
OK			

- A) The number of hotel rooms.
- B) The number of KNX lines of the project. The program will automatically add a second KNX line if we exceed 52 rooms so that there is sufficient power for the KNX devices. In general, we should calculate more lines if there are different buildings, so we should calculate one KNX line per building.
- C) If it is a new hotel. If we do not select the new hotel option, the program will assume that it is an extension where we have already performed the first phase (or more than one) and will only calculate the extension materials for the additional rooms. In the case of an extension, a field will appear for the number of rooms we have already selected as well as a field for the existing KNX lines.
- D) We will have to choose if we want an external brightness sensor. One of the available scene types is Bright/Dark. In this case two scenarios are available as the button press will be evaluated with the brightness of the room. For example, in the TV scenario we would want to turn off the lights that can cause glare on the TV and turn on the hidden lighting or desk light. Selecting Bright/Dark if the room is dark will turn the lights on, but in a bright room they will not turn on.
If the external brightness sensor type TR/A 1.1 is not installed in the installation, the Bright/Dark scenes do not function properly and the **Dark output is always activated**.
- E) We choose whether we want a five-hour remote technical support package (for the price of three hours).
- F) We enter the type of Aidoo KNX gateway required to communicate with the project's split-type air conditioning unit. If we do not know the type of Aidoo, a warning will appear not to order the materials before checking compatibility.

Press **OK** to navigate to the relevant page to see the bill of materials and the Chameleon license code (indicative type HC.CC.ASU.1.2.3.1) along with its price.



Exit

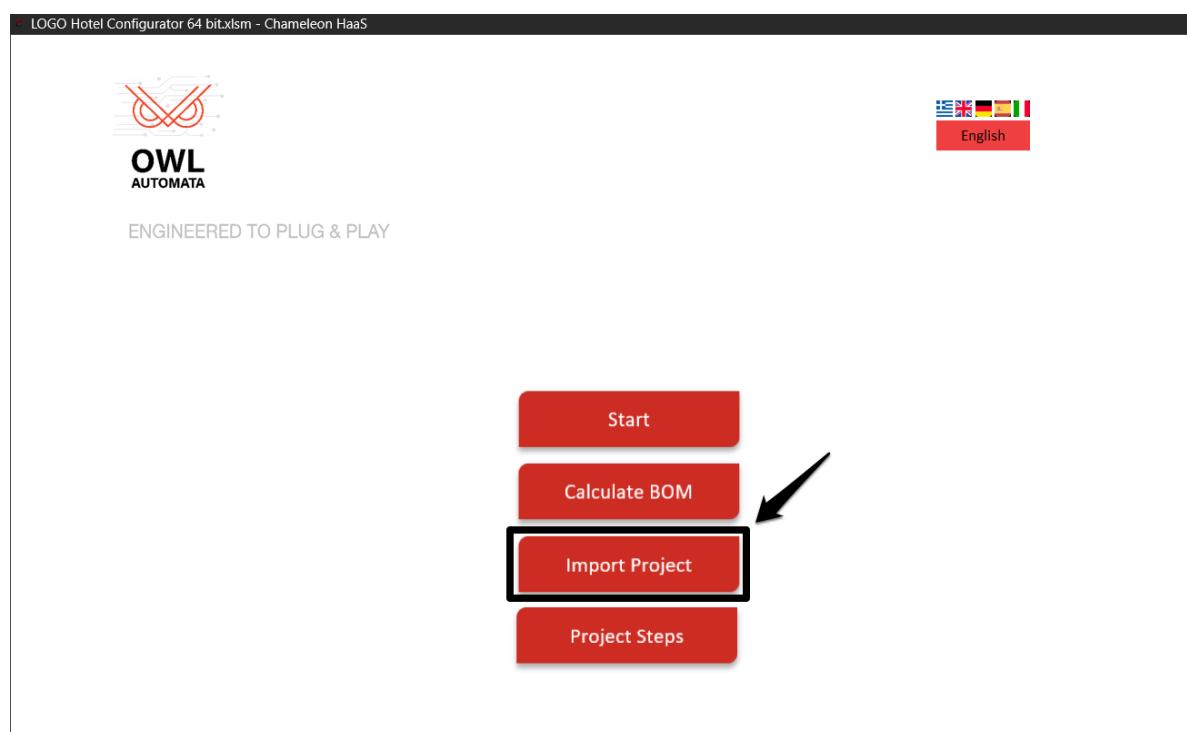
Back

Print

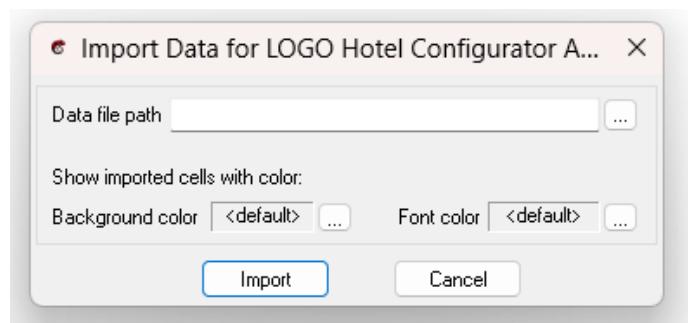
There is an option to print the page, navigate back to the intro page, or exit the program.

16. Import project function

In the intro page, pressing the **Import project** button

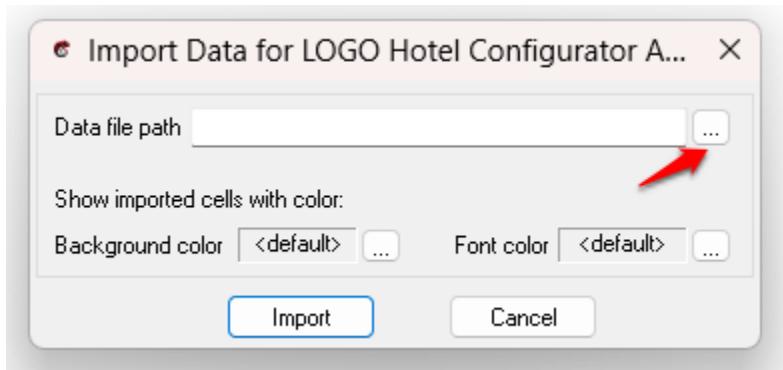


will open the following popup:

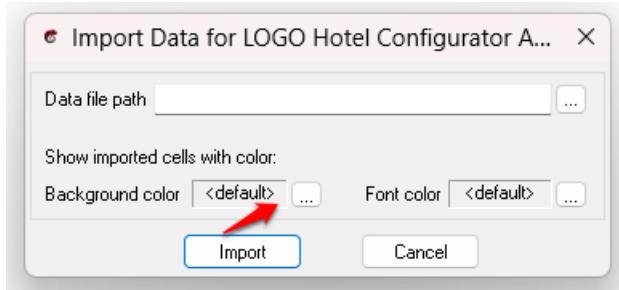




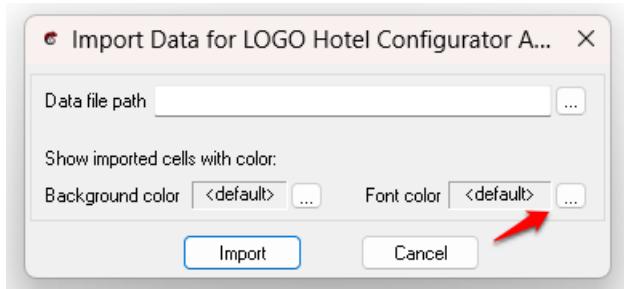
Pressing the three dots in the first field, a previous exported project file can be selected (.dat file).



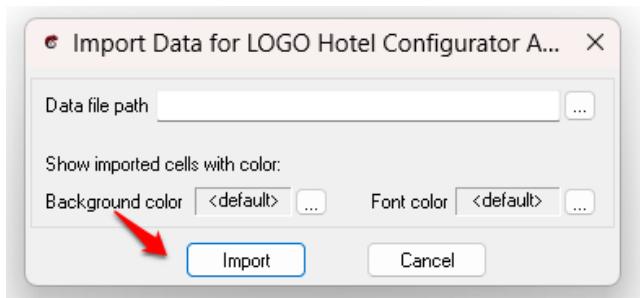
In the two fields below, we can opt to highlight any changes made when compared to the default design. More specifically, by pressing the first three dots



We can change the background color of the changed fields, or by pressing the second three dots we can change the font color

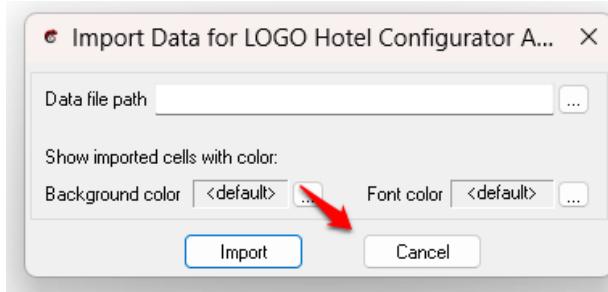


Afterwards by pressing the **Import** button the project will be imported





or by pressing the **Cancel** button the process is aborted.



17. Project Steps

Finally on the intro page there is a **Project Steps** button and by pressing it

LOGO Hotel Configurator 64 bit.xlsx - Chameleon HaS

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Start

Calculate BOM

Import Project

Project Steps

you will navigate to the interactive Project Steps page. Answering two initial questions will dynamically create the steps to follow. In each case the list will describe the complete set of sequential steps that must be taken to complete the project.

LOGO Hotel Configurator 64 bit.xlsx - Chameleon HaS

1 Ask for a demo
In the Default export files folder you will find all the files describing the default initial design.

2 Is the initial design satisfactory?
Examine along with your customer if the default design is satisfactory.

3 Is the Aidoo compatible with the Split Unit?
Click on the link below.
<https://www.aironecontrol.com/eu/en/projects/web-tools/compatibilities/aidoo/>
Select Aidoo KNX
Select a brand and a unit.
From the green icon, download the file and make sure there is no Warning in the last column.

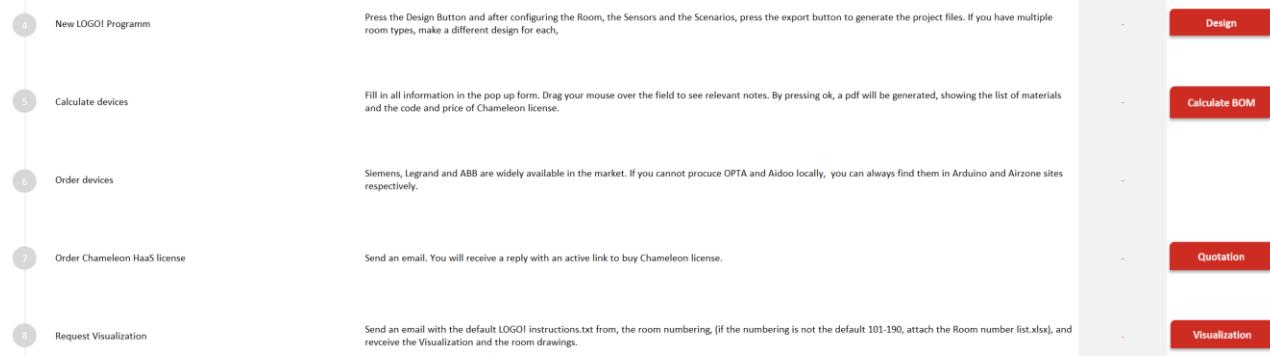
Next

Yes

No

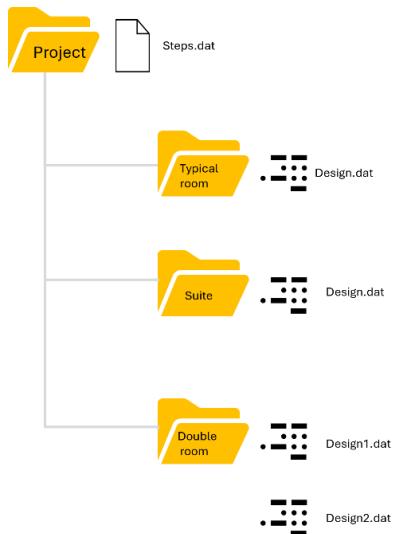
In the illustrative image that follows, for example, we have chosen to make a new design. In step 4, we will press the design button to be taken to the main input/output parameterization page (IO setting). In step 5 we calculate the Bill of Materials as described above. In step 6 (Request offer) the program will compose an

email ready to be sent and so on



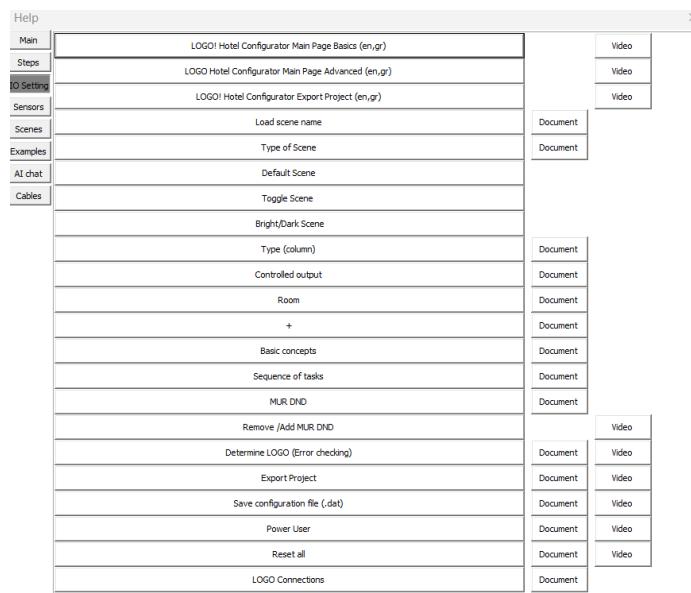
18. Keeping project records

In the simple case that there is only one typical room in the project, it is sufficient to have a folder with the name of the project. Starting to work with the Configurator we save every time the .dat file with our progress and import it again to continue the design. In the event that the project has more than one room types or multiple alternative designs for a room type it is good practice to make separate folders to store the different .dat files.



19. Help

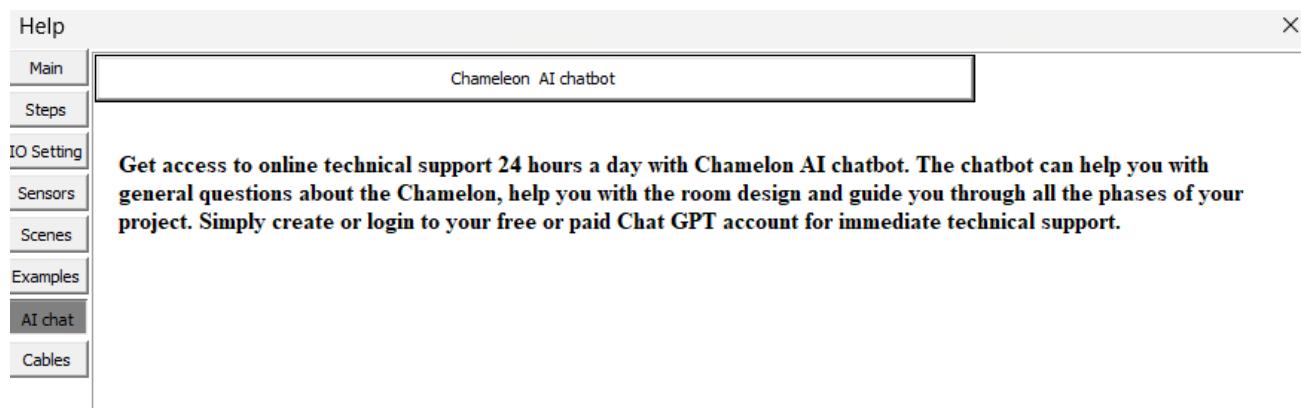
The Configurator comes with a full interactive help feature, with more than 80 short videos and extracts from the manual (accessed by pressing the Video and Document buttons respectively). For critical items information is also displayed in a field upon hovering over the help topic.



In this configuration we have again two scenes at our disposal. The first time we press the button the first scene will be executed. The second time we press it, the second (Toggle) scene will be executed. A typical use would be in the Night scene. On the first button press the tenant will turn off all the lights. The second time he presses the button (assuming he wants to visit the toilet during the night) the toilet light will turn on. Pressing the button a third time will turn off all the lights again, and so on.

Help can be accessed by the **Help** button in each page and opens in the relevant page. So, if you access Help from the IO Setting page, the help will open in the IO Setting and display the relevant entries. The window is floating, you can keep it open with free placement and keep working on the Configurator. In some Help articles that are pertinent to various pages, upon hovering over the topic you will see below a “Click to view entry” notification. Upon pressing on the topic, you will be redirected to the page and the topic will flash three times so that you can locate it easily.

Finally, in the AI Chat page by pressing on the topic you can access the Chameleon AI system help agent.





Simply login to a free or paid Chat GPT account and get instant technical help in your language. The AI agent is trained with Chameleon specific knowledge and can help you with the design process and with general or more specific queries about Chameleon.



Chameleon HaaS

By owl-automata.com



Chameleon system help agent



Message Chameleon HaaS





Chameleon

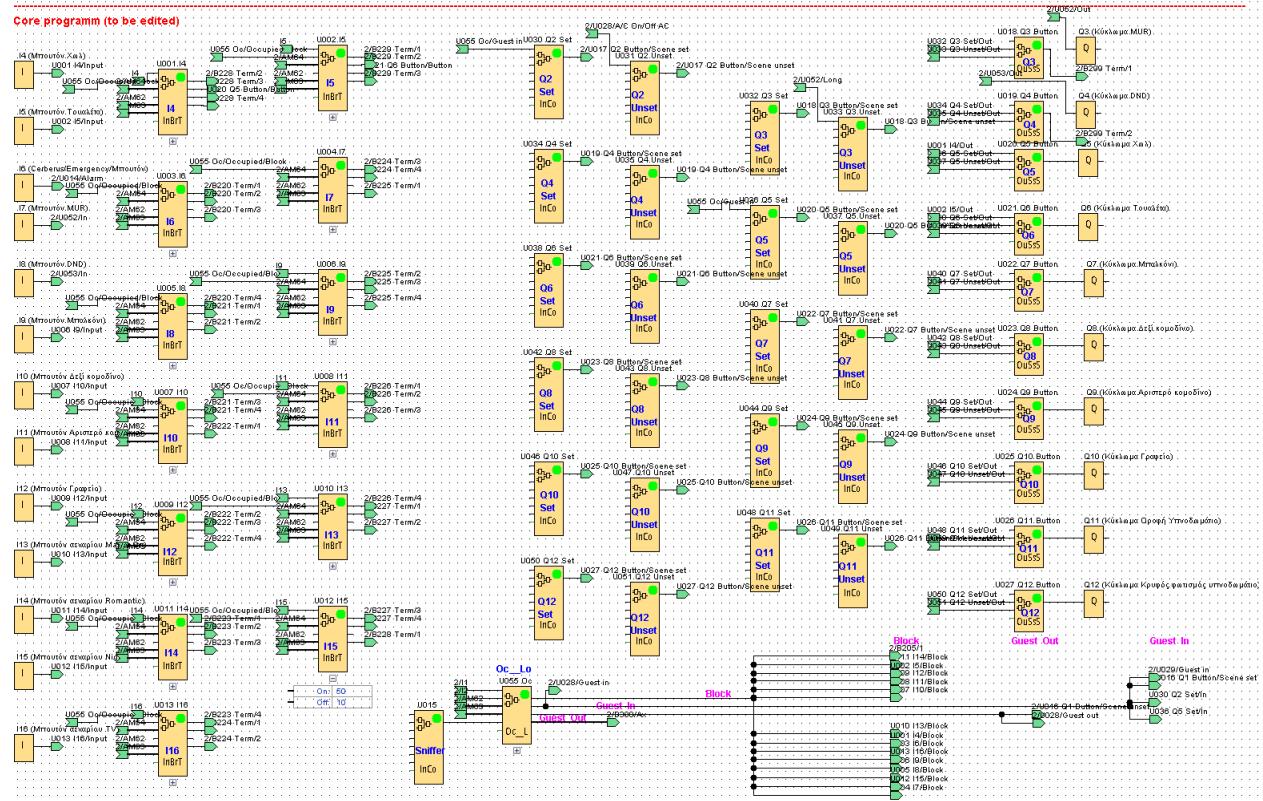
LOGO! Diagram

1. Structure:

There are two types of programs to make changes: the Default alter Scenes and the Template files. In both cases, we can find the same structure as follows

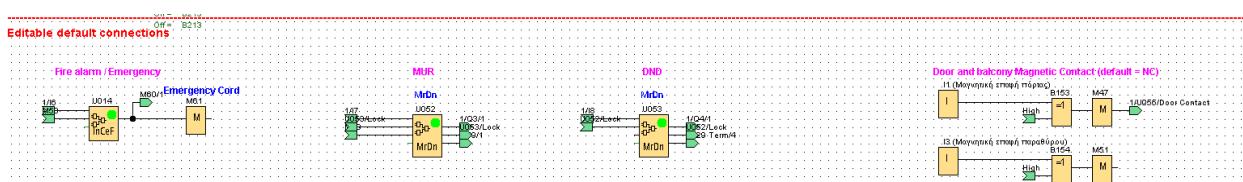
1.1. First Page

The 1st page is titled Core Programm and this is where all the inputs and outputs are gathered to make the changes to our connections



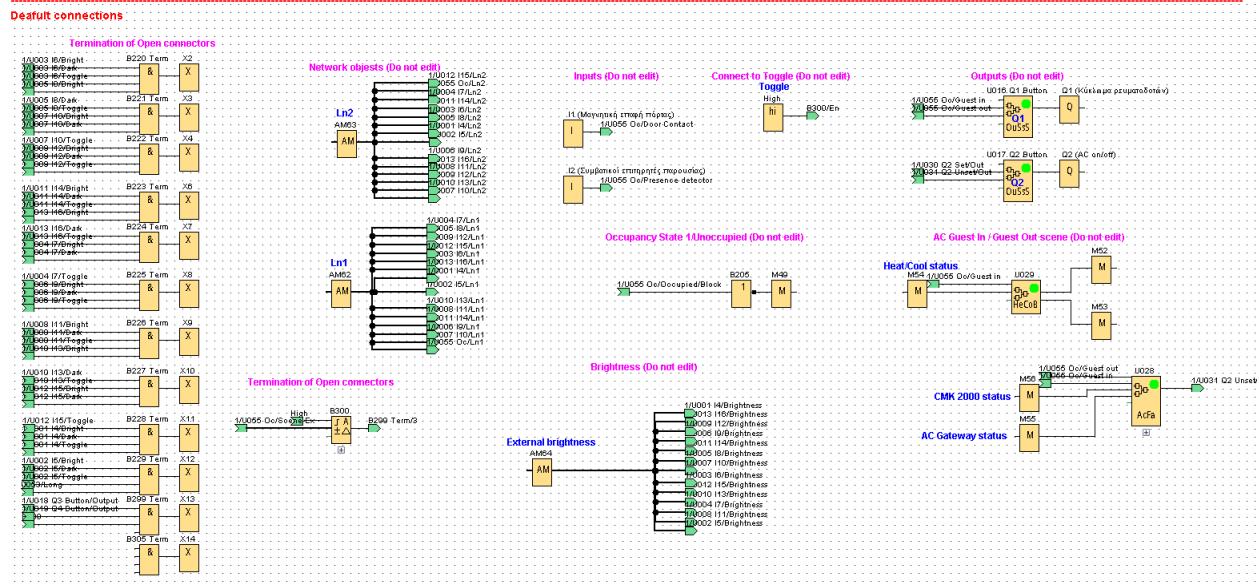
1.2. Second page

On the 2nd page we will find two different sections. The first section is called Editable default connections and has the emergency cord, MUR and DND modules. (Indicative image)



In the second section of the page titled Default connections there are necessary connections that should not be changed with a mark (Do not edit) and a column titled "Termination of open connectors" where we

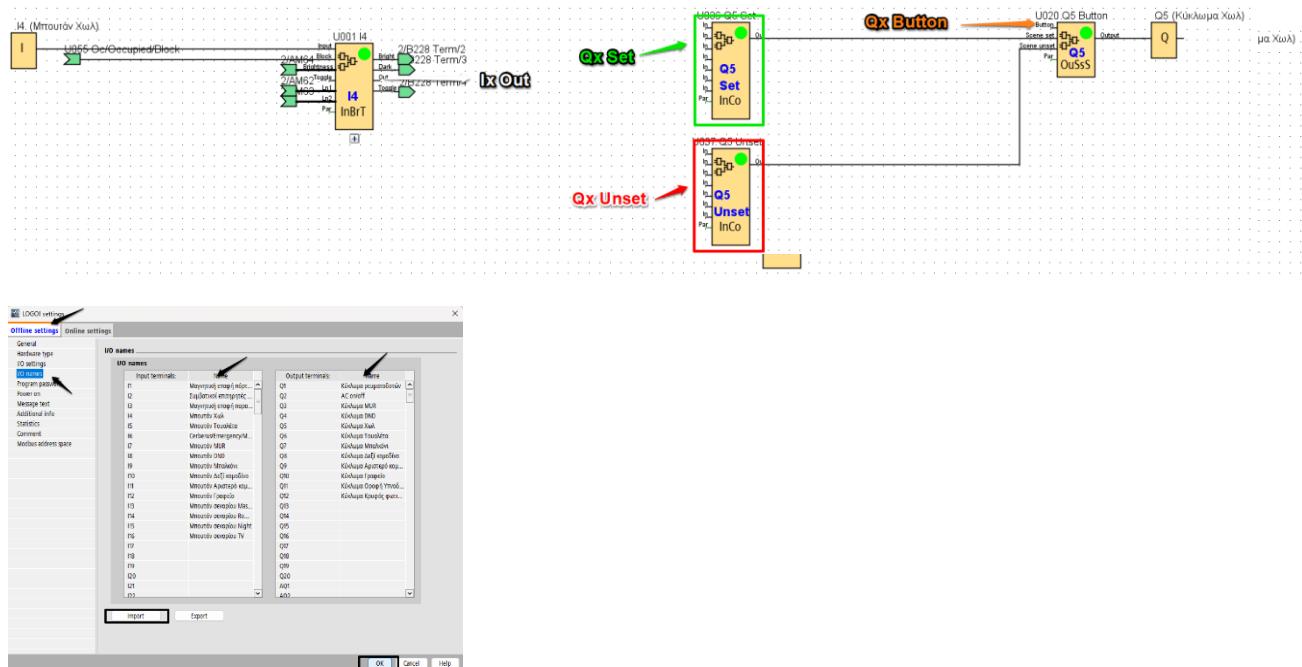
terminate our outputs for the program to run.



2. Inputs / Outputs

On the 1st page as we said we can make the changes to our connections. The basic UDFs are shown in the image below. We notice that the changes we have made to the names of the inputs and outputs have been parsed to the program by importing the .csv file from the configurator. The inputs are already connected to the corresponding UDF (InBrToLo) and the outputs to the UDF (OuSsSu) and we also observe the corresponding markings I4, Q5 in the example image.

The possible connections between I4 and Q5 are shown in the following image.



Import names from .csv file

If circuit changes are required, instructions on what connections to make have already been autogenerated by the Configurator software in the LOGO! instructions file.

Instructions will be of the type in the example that follows (**Example 1**)



You have chosen a room with , Do Not Distrurb, Emergency cord. Choose from Diagram Projects folder, the file TemplateDNDEC.lsc. Import the created .csv file and programm LOGO! with the instructions that follow below. Paste the new TemplateDNDEC.lsc into the Network projects located in Network projects without diagrams folder. The files (Network_project_final_Roomsxtoxx.snp) are ready for download to LOGO!. Make sure that you have a proper visualization and room drawings.

Select UDF Oc

Select pin Guest In

Right click (Connect with input connector...) on the pin and write *Q5

Select Set

Right click (Connect with input connector...) on the pin and write *Q6

Select Set

Select UDF Oc

Select pin Guest Out

Right click (Connect with input connector...) on the pin and write *Q5

Select Unset

Right click (Connect with input connector...) on the pin and write *Q6

Select Unset

Right click (Connect with input connector...) on the pin and write *Q7

Select Unset

Right click (Connect with input connector...) on the pin and write *Q8

Select Unset

Right click (Connect with input connector...) on the pin and write *Q9

Select Unset

Right click (Connect with input connector...) on the pin and write *Q10

Select Unset

Right click (Connect with input connector...) on the pin and write *Q11

Select Unset

Right click (Connect with input connector...) on the pin and write *Q12

Select Unset

Select UDF I7

Select pin (Out) Delete the termination of the Out pin

Select UDF I13

Select pin (Out) Delete the termination of the Out pin

Right click (Connect with input connector...) on the pin and write *Q6

Select Set

Right click (Connect with input connector...) on the pin and write *Q11

Select Set

Right click (Connect with input connector...) on the pin and write *Q12

Select Set

Select UDF I14

Select pin (Out) Delete the termination of the Out pin

Right click (Connect with input connector...) on the pin and write *Q5

Select Unset

Right click (Connect with input connector...) on the pin and write *Q7

Select Unset

Right click (Connect with input connector...) on the pin and write *Q8



Select Unset

Right click (Connect with input connector...) on the pin and write *Q9

Select Unset

Right click (Connect with input connector...) on the pin and write *Q10

Select Unset

Right click (Connect with input connector...) on the pin and write *Q11

Select Unset

Right click (Connect with input connector...) on the pin and write *Q12

Select Set

Select UDF I15

Select pin (Out) Delete the termination of the Out pin

Right click (Connect with input connector...) on the pin and write *Q5

Select Unset

Right click (Connect with input connector...) on the pin and write *Q6

Select Unset

Right click (Connect with input connector...) on the pin and write *Q7

Select Unset

Right click (Connect with input connector...) on the pin and write *Q8

Select Unset

Right click (Connect with input connector...) on the pin and write *Q9

Select Unset

Right click (Connect with input connector...) on the pin and write *Q10

Select Unset

Right click (Connect with input connector...) on the pin and write *Q11

Select Unset

Right click (Connect with input connector...) on the pin and write *Q12

Select Unset

Select UDF I16

Select pin (Out) Delete the termination of the Out pin

Right click (Connect with input connector...) on the pin and write *Q5

Select Unset

Right click (Connect with input connector...) on the pin and write *Q8

Select Unset

Right click (Connect with input connector...) on the pin and write *Q9

Select Unset

Right click (Connect with input connector...) on the pin and write *Q10

Select Set

Right click (Connect with input connector...) on the pin and write *Q11

Select Unset

Right click (Connect with input connector...) on the pin and write *Q12

Select Set

Select UDF I4

Select pin (Out) Delete the termination of the Out pin

Right click (Connect with input connector...) on the pin and write *Q5

Select (Button)

Select UDF I5

Select pin (Out) Delete the termination of the Out pin

Right click (Connect with input connector...) on the pin and write *Q6
 Select (Button)

Select UDF I9

Select pin (Out) Delete the termination of the Out pin
 Right click (Connect with input connector...) on the pin and write *Q7
 Select (Button)

Select UDF I10

Select pin (Out) Delete the termination of the Out pin
 Right click (Connect with input connector...) on the pin and write *Q8
 Select (Button)

Select UDF I11

Select pin (Out) Delete the termination of the Out pin
 Right click (Connect with input connector...) on the pin and write *Q9
 Select (Button)

Select UDF I12

Select pin (Out) Delete the termination of the Out pin
 Right click (Connect with input connector...) on the pin and write *Q10
 Select (Button)

*In Editable Default Connections (right side), locate XOR gate B153 and erase connection to High. Input I1 is now Normally Open (NO).

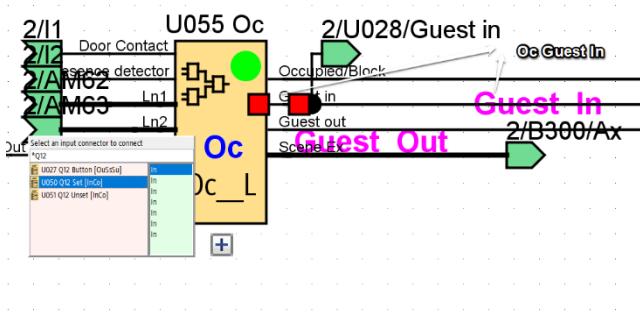
Example 1

Select UDF Oc
 Select pin Guest In

Right click (Connect with input connector...) on the pin and write *Q5
 Select Set

We locate the Guest In pin of UDF Oc in the bottom of the first page and we start connecting by following the instructions.

All input UDFs are also located on the first page.



If no instructions can be found for an input like for UDF I7 in Example 1,

Select UDF I7

Select pin (Out) Delete the termination of the Out pin

it means that we have left the Scene executed by this input (in our case I7) blank and we should run the Configurator again on the Scenes page and press export project again to generate new instructions.

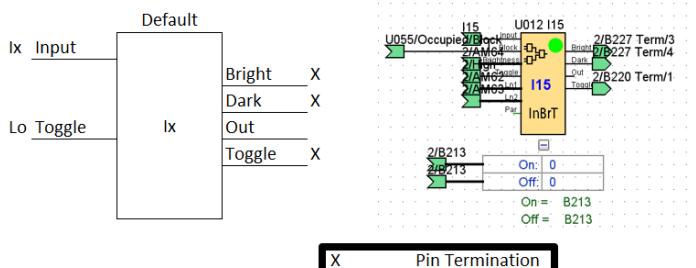
In case at the end of the instructions we have an instruction with an asterisk, like in Example 1,

*In Editable Default Connections (right side), locate XOR gate B153 and erase connection to High. Input I1 is now Normally Open (NO).

we will find the gates (B153 and B154) in the upper right part of the 2nd page (Editable default connections). The instructions will have already guided us which Diagram file to open and which network file to paste into.

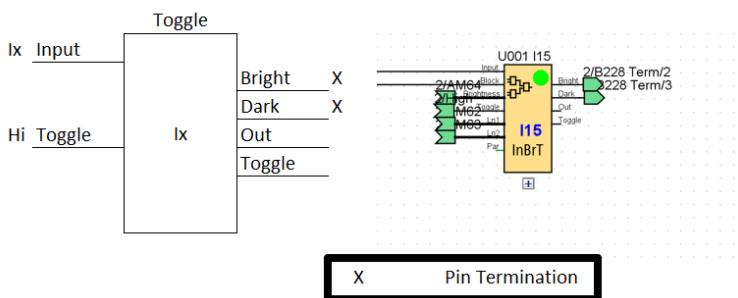
2.1. Typical connections for Inputs

If an input is 1-1 type or a Default Scene, then the input UDF must be connected as follows



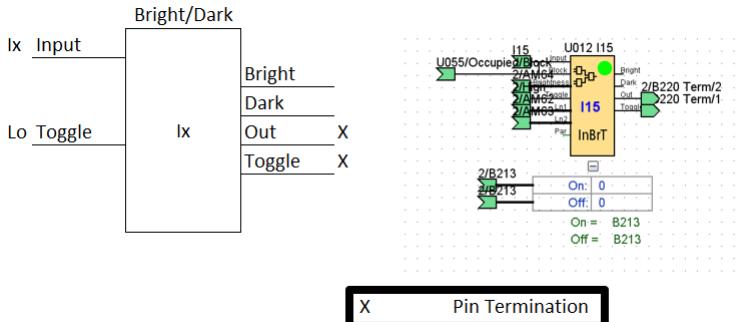
2.2. Typical connections for Toggle Scenes

If an input is a Toggle Scene, then the input UDF must be connected as follows



1.1. Typical connections for Bright/Dark Scenes

If an input is a Bright/Dark Scene, then the input UDF must be connected as follows





Chamele~~on~~

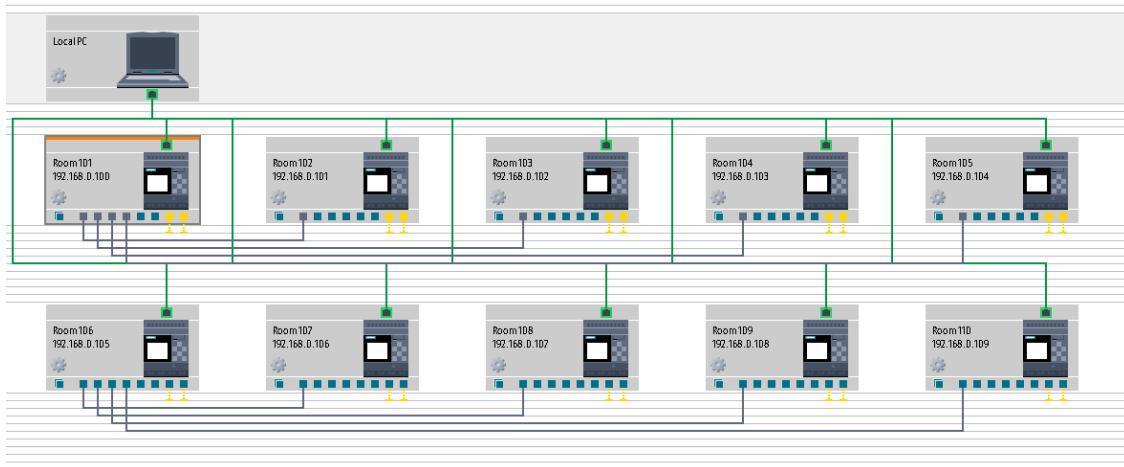
LOGO! Programming

1. LOGO! base module programming

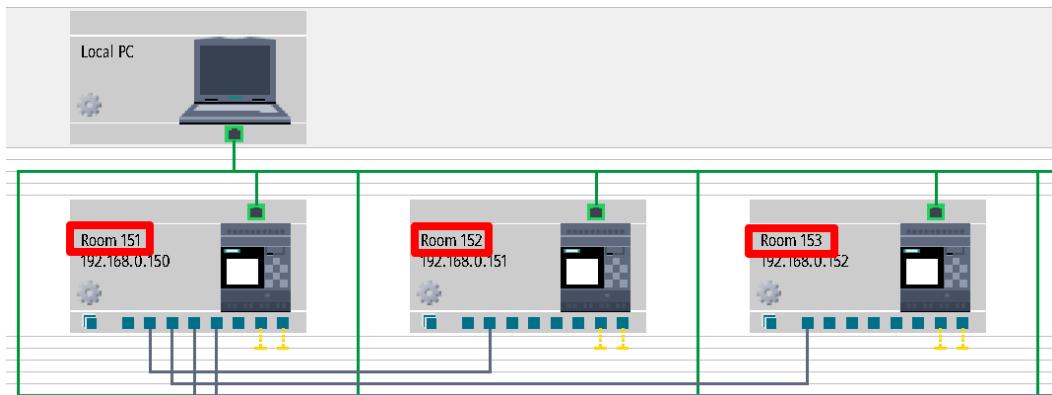
A complete network project is needed for the programming of LOGO! devices of our hotel installation. A maximum of 9 network projects will be available to us, depending on the number of hotel guest rooms.

Name	Status	Date modified	Type	Size
LOGO! Network_project_Rooms01to10.snp	Green	2023-09-01 10:00:00	LOGO! Project	100 KB
LOGO! Network_project_Rooms11to20.snp	Green	2023-09-01 10:00:00	LOGO! Project	100 KB
LOGO! Network_project_Rooms21to30.snp	Green	2023-09-01 10:00:00	LOGO! Project	100 KB
LOGO! Network_project_Rooms31to40.snp	Green	2023-09-01 10:00:00	LOGO! Project	100 KB
LOGO! Network_project_Rooms41to50.snp	Green	2023-09-01 10:00:00	LOGO! Project	100 KB
LOGO! Network_project_Rooms51to60.snp	Green	2023-09-01 10:00:00	LOGO! Project	100 KB
LOGO! Network_project_Rooms61to70.snp	Green	2023-09-01 10:00:00	LOGO! Project	100 KB
LOGO! Network_project_Rooms71to80.snp	Green	2023-09-01 10:00:00	LOGO! Project	100 KB
LOGO! Network_project_Rooms81to90.snp	Green	2023-09-01 10:00:00	LOGO! Project	100 KB

Every network project contains 10 LOGO! base module units which correspond to 10 hotel guest rooms.



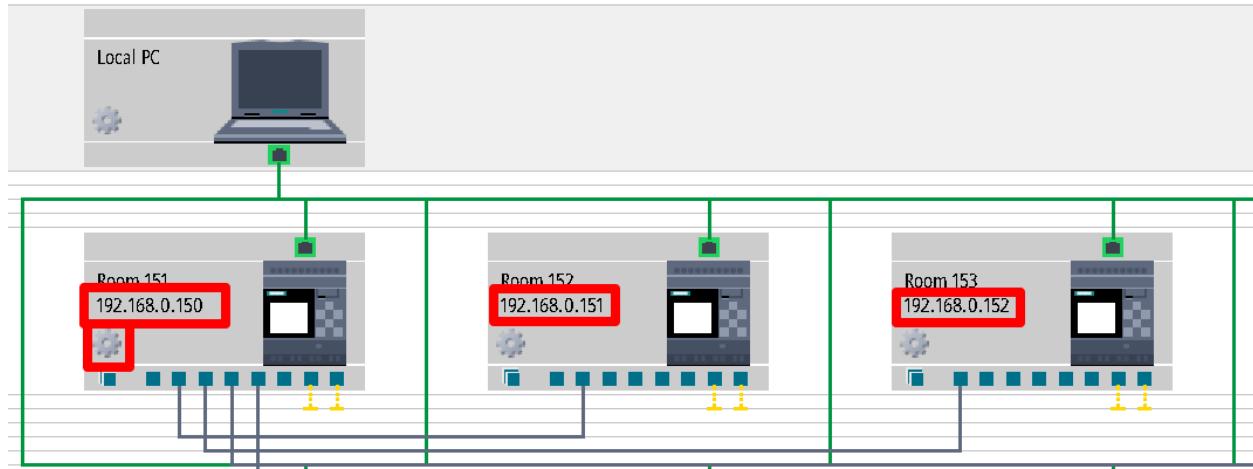
We will use a number of network files depending on the number of hotel guest rooms. As an example, if we have 53 rooms then we will use 6 network projects. We will only download the program on 3 out of 10 rooms of the sixth file. Each LOGO! base module has a name stating the room number and can be easily identified.



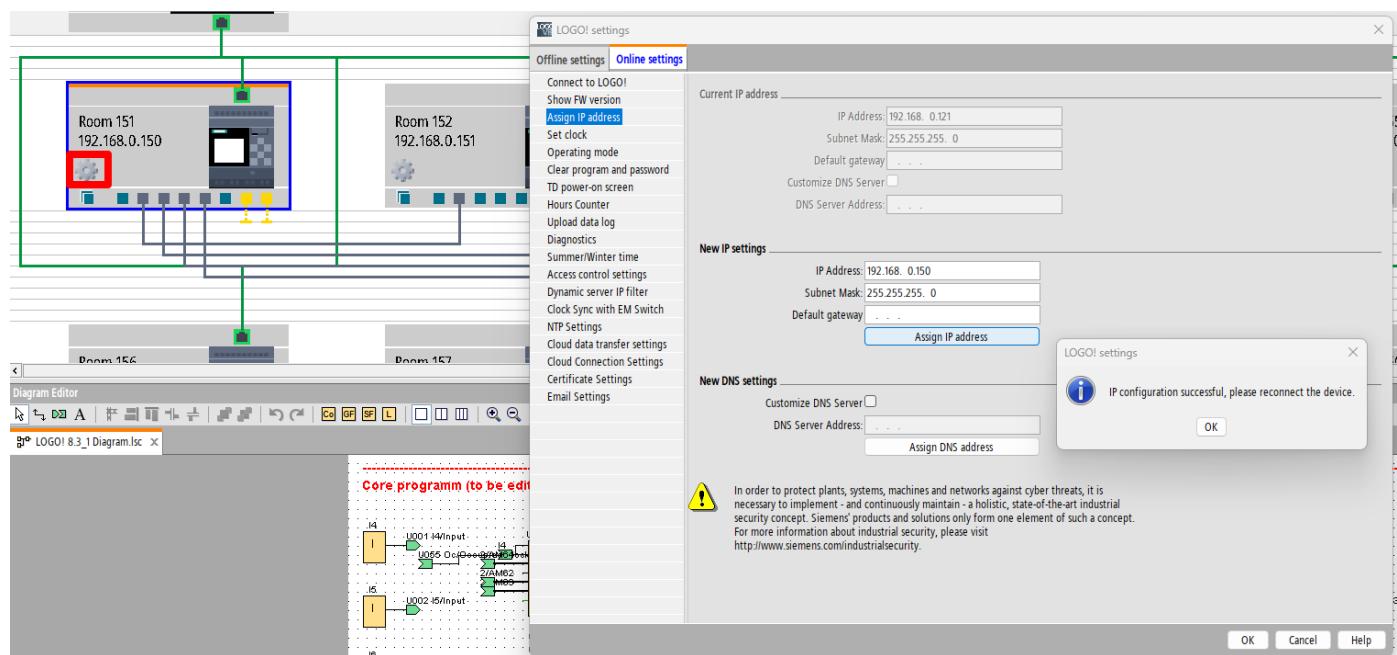
2. Download program to LOGO!

It is recommended that we program the LOGO! base modules off site (e.g. in the office) for easier system commissioning. We can either download the full program to LOGO! or only the IP address settings.

To download only the IP settings in each LOGO! unit of our network project, we click on the gear icon and a window will open with the IP address fields.

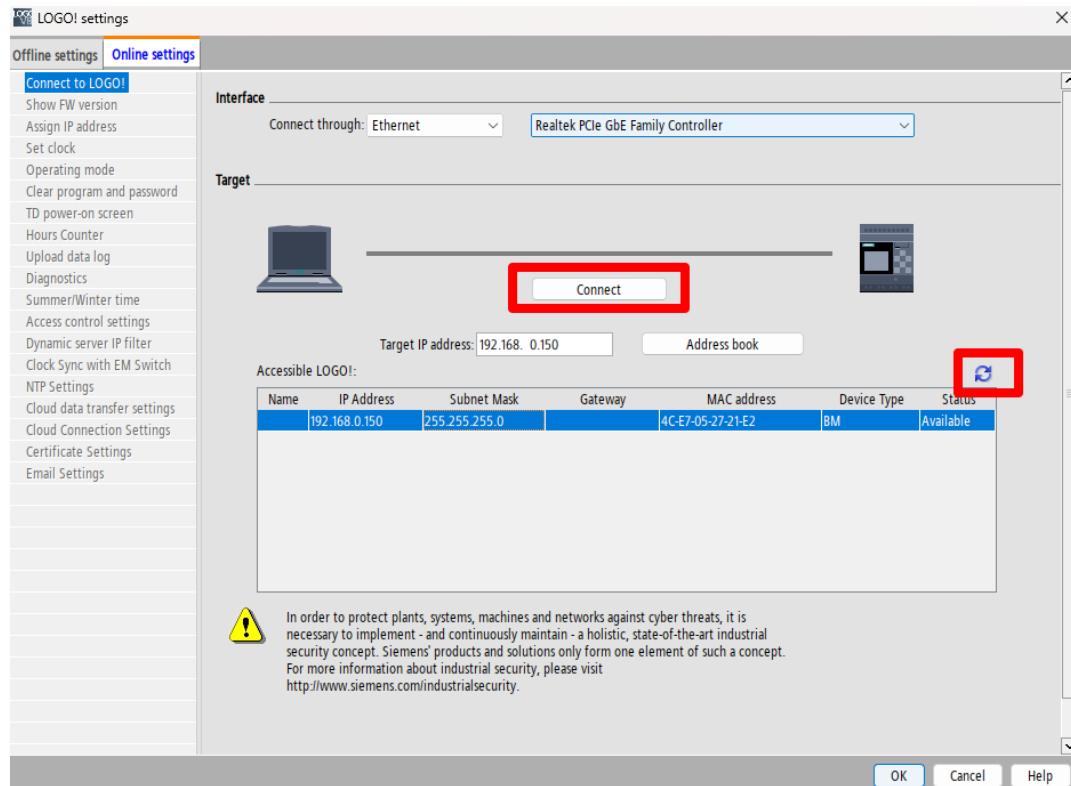


Navigate to Online Settings-> Assign IP address and set the IP address we see on the network project.



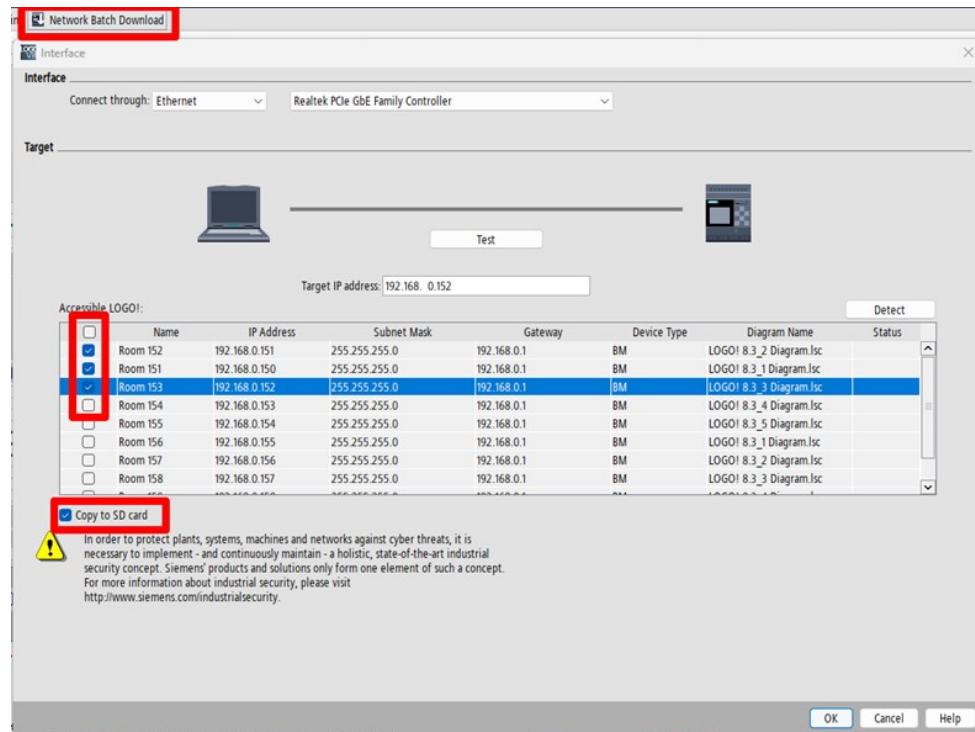
It is highly recommended to place a label with the room number on each LOGO! device after programming the IP address, to facilitate the installation of the devices.

Connect the LOGO! base module with your computer with an ethernet cable and click on refresh to discover connected LOGO! devices. Choose the device from the list and connect:



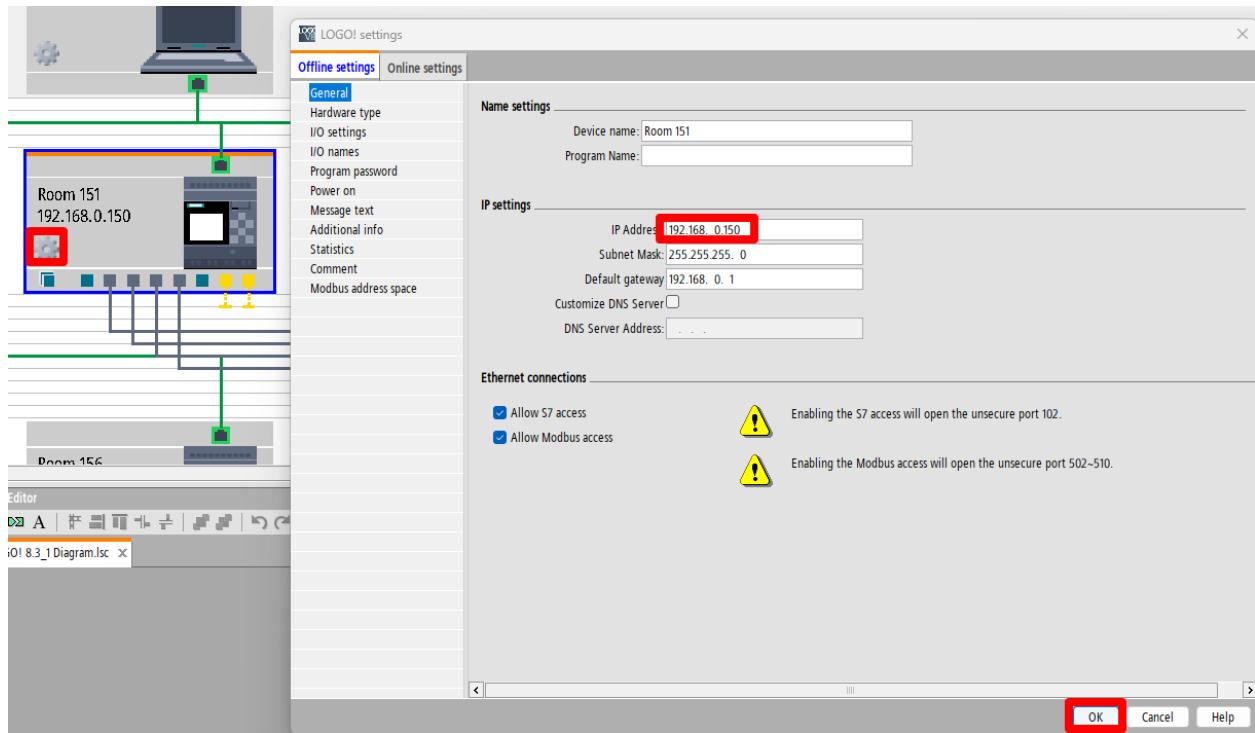
3. Batch Download

From version 8.4.0 of LOGO! Soft Comfort a Network Batch Download function is available

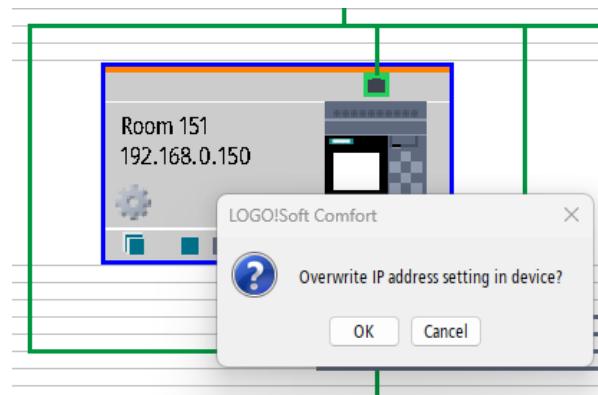


4. Change LOGO! IP address

If we are requested to change the IP address, press the gear icon to set the new IP in the Network Project file and download.

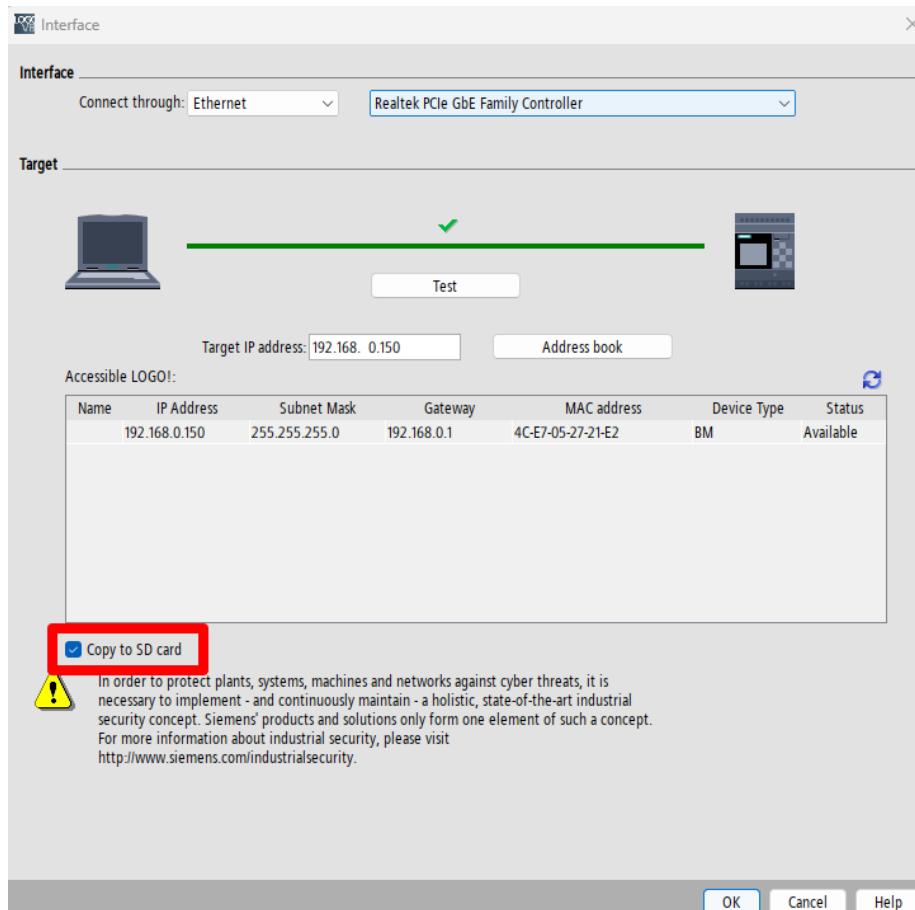


Confirm when asked to overwrite the IP.



5. Copy to SD card

There is a strong recommendation to use an SD card in LOGO!. Checking the Copy to SD card option, the program will be stored in the card (.bin file).



The specific feature of LOGO! constitutes a **significant technical advantage of the solution**, since in the event of a failure the time to repair the failure (MTTR) is almost zero and does not require the intervention of the specialized programmer.

The hotel maintenance personnel can wire a new LOGO! unit and by inserting the SD card, the room works again.



Chameleon

KNX

! The software ETS 5 or ETS 6 is required to be able to download the KNX project to the devices. You have to make sure that you have ETS installed on your computer, along with a valid Professional license, before you move forward with this guide's steps.

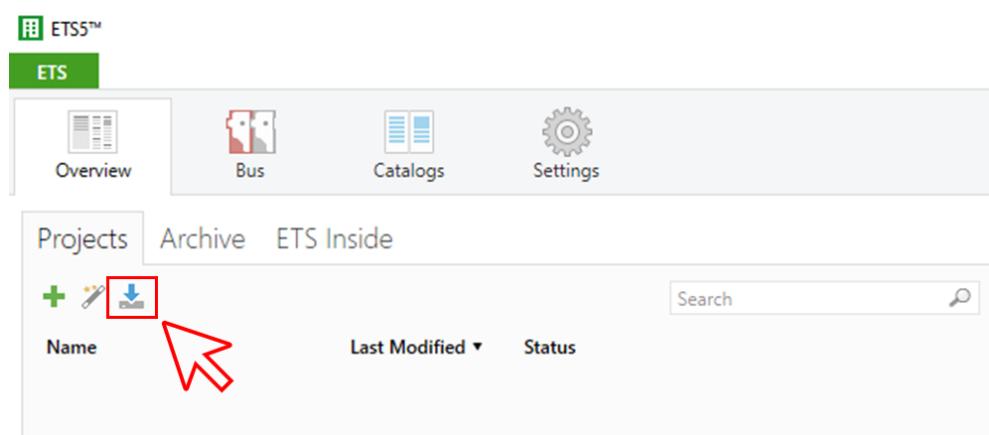
1. Import project ETS

The folder “ETS Project file” contains the ETS project file for the programming of KNX devices of the Chameleon HaaS system. Open ETS and choose import file:

ETS 6:



ETS 5:



When the pop-up window of import opens, we browse our files to find and select to open the file “Chameleon HaaS.knxproj”.

2. Building structure

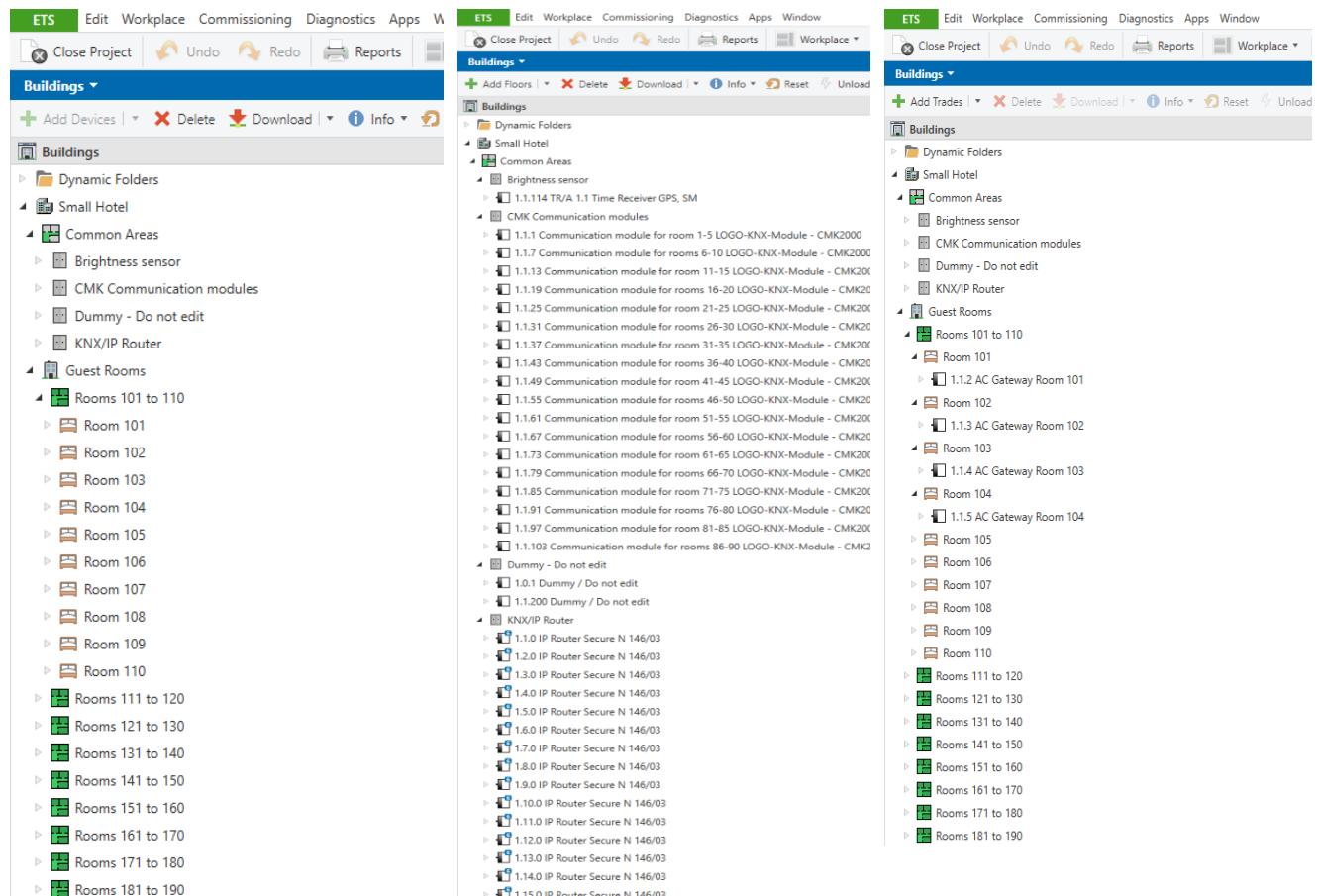
The ETS project file of Chameleon HaaS has the following building structure:

- Main building “**Hotel**”
 - Area for system devices “**Common Areas**”
 - Common area devices “**CMK Communication modules**”
 - Common area devices “**KNX/IP Router**”
 - Common area devices “**Brightness sensor**”
 - Common area devices “**Dummy**”
 - Area for rooms “**Guest Rooms**”
 - Areas with 10 room each
 - Room X

The “**CMK Communication modules**” area contains all CMK2000 gateway devices, each gateway is necessary for the communication of the LOGO! base modules of five rooms with the KNX network.

The “**KNX/IP Router**” area contains all the necessary devices for the communication of KNX with the IP network. In the Chameleon HaaS ETS project, 15 KNX/IP routers are already configured (filter table, IP address, physical address) and you can use any number of them, depending on the number of KNX lines of your project.

The “**Brightness sensor**” area contains the external brightness sensor device TR/A 1.1 (ABB), which is necessary if you need to implement Bright/Dark lighting scenes in your project. Chameleon HaaS needs to have the brightness sensor option checked in the BoM calculator, to include this device in the bill of materials.



Building structure

Common area devices – CMK2000

Room devices – KNX AC Gateway

The “**Dummy**” area does not contain any actual KNX device, only a virtual dummy is used for the correct configuration of the filter tables of the KNX/IP routers.

Each room area, e.g. Room 111, contains the A/C unit KNX gateway of the corresponding room.



3. CMK2000 – Change IP addresses

The LOGO! base module devices of the rooms, communicate with the KNX network through IP (Ethernet). As soon as we have the final IP address range that we will use in our hotel project, we must update the corresponding KNX CMK2000 gateway devices (if necessary). To change the IP address:

- i. Select the CMK device we want to change the IP address
- ii. Select “Parameters”
- iii. Open “General” settings

The screenshot shows the ETS (Engineering Tool Suite) interface. On the left, there's a tree view of the building structure under 'Buildings'. A specific CMK2000 device is selected, highlighted with a blue box. The main window shows the 'General' settings for this device. Two specific fields are highlighted with red boxes and circled: 'IP address of LOGO! base module' (labeled A) and 'Own IP address' (labeled B). Arrows point from these circled areas to the respective text input fields. The 'Parameters' tab is also highlighted with a red box and an arrow pointing to it.

Example: Change the IP address of CMK2000 of rooms 101 to 105

- iv. **Point A:** Change the IP address of LOGO! base module that communicates with this CMK. The CMK2000 communicates only with the LOGO! of the first of the total five rooms (in this example room 101), so we must enter the IP address we have configured in Room 101 LOGO! base module
- v. **Point B:** Change the IP address of CMK2000 device. The IP address of the CMK2000 must be in the same subnetwork as the IP address we have set for LOGO! base module in the previous step.

Repeat this procedure for any CMK2000 device you want to change the IP address. No additional changes are necessary in the ETS project for the KNX/LOGO communication.



If the Ethernet network of the installation allows it, changes in the IPs of the CMKs and LOGO! units will not be necessary. The default IP pool is 192.168.0.99 to 192.168.0.207



It is important that the IP of the LOGO! unit is correct and belongs to the “master” LOGO! of the 5 rooms cluster (the first of the 5)

4. Insert additional KNX lines – Copy devices to the new line

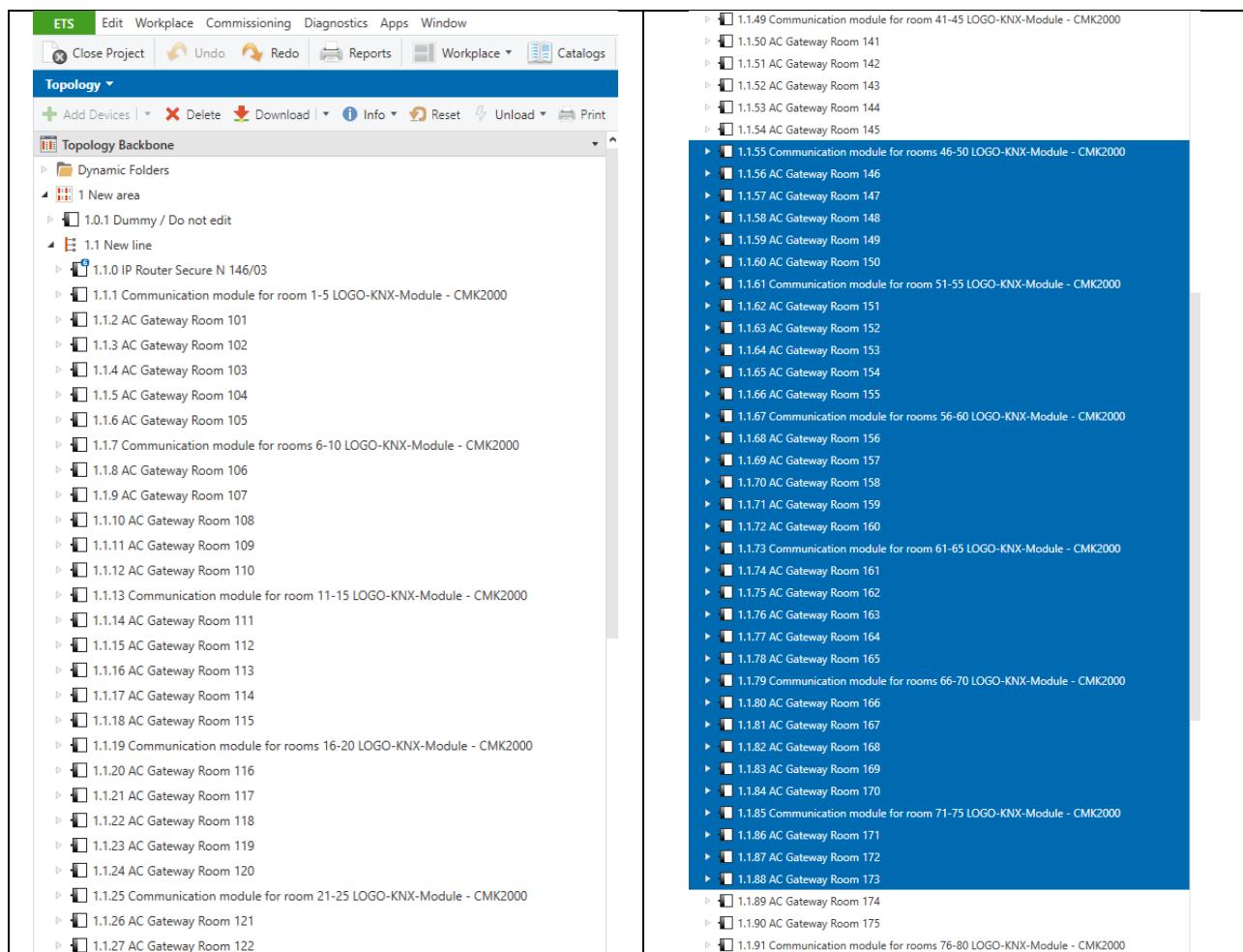
It is possible that our hotel project requires more than one KNX line. It is necessary to move the corresponding KNX devices **from line 1.1 to the right line of our installation**. The ETS project of Chameleon HaaS system has all devices in line 1.1 and has already 14 additional KNX lines configured and ready to use. Choose the “Topology” workplace panel in ETS to view the structure.

We can move any device from line 1.1 to any other line with “Cut – Paste” commands, in workplace panel “Topology”. Choose the devices you want to move from line 1.1 and right-click them to choose “Cut”. Afterwards, choose the line you want to move them to and right-click on it to choose “Paste”.

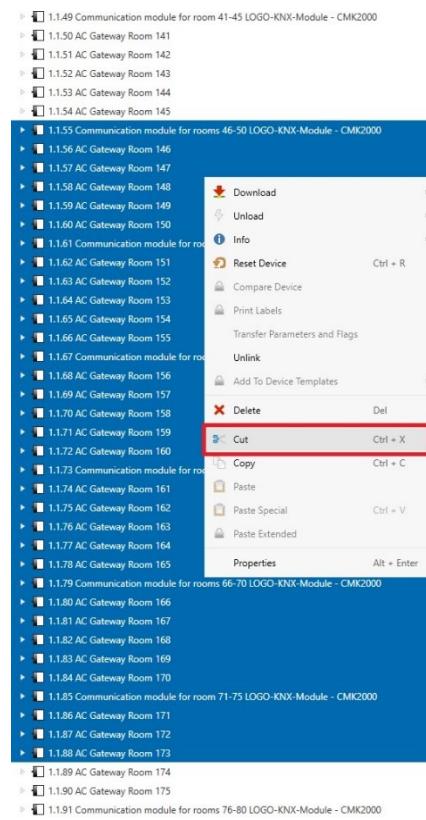
The filter tables of the KNX/IP routers are updated automatically and no further action is required.

Example : Move devices of room 46 to 73, from line 1.1 to line 1.2

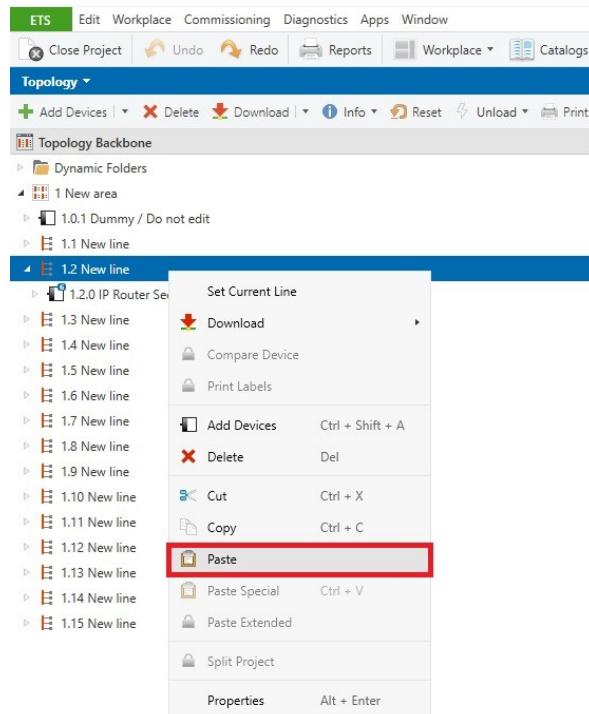
Open workplace “Topology” and expand line 1.1. Select all devices under Room 45, up to Room 73 (Since we want rooms 46 to 73 to be moved to other line)



Right-click on them and choose “Cut”.

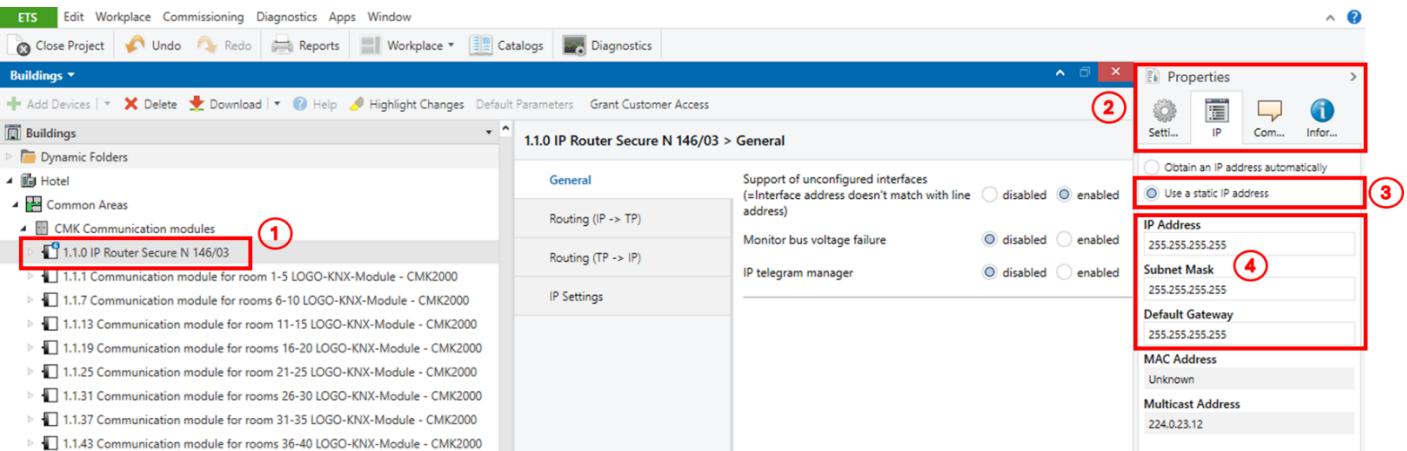


Select the line you want to move them to, in our example this is line 1.2. Right-click on it and choose “Paste”.



5. IP/KNX router – Change IP address

We can change the IP address settings of a KNX/IP router device by selecting the device and open the side pane menu and choose “Properties”:



Select “Use a static IP address”, as shown in **point 3**. Enter the IP address settings you want to use in the fields of **point 4**. As an example, if we want to set the IP address 192.168.0.210 to our device, then:

IP Address: 192.168.0.210
 Subnet Mask: 255.255.255.0
 Default Gateway: 192.168.0.1

The values of Subnet Mask and default gateway are usually in the form of:

- **Subnet Mask** = 255.255.255.0
- **Default Gateway** = XXX.XXX.XXX.1

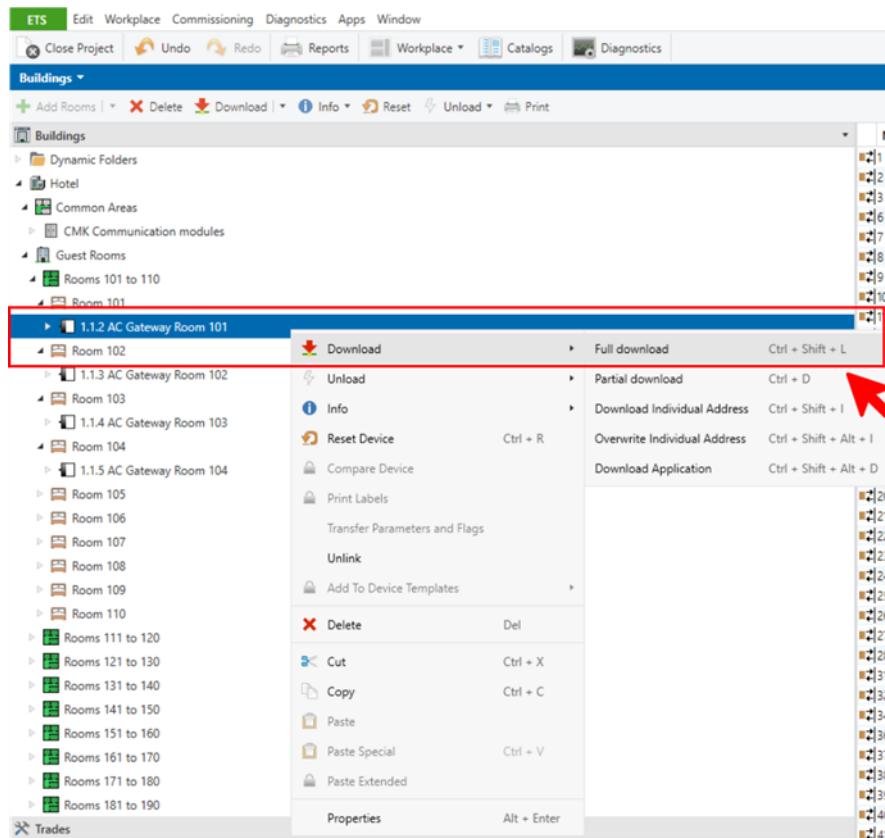
 Where XXX.XXX.XXX is the address range we chose for IP setting, in our example this value is 192.168.0

You have to check with the IT staff of your hotel project to make sure the above settings are right for your project

 Several KNX/IP router devices have a similar parameter window as the above. However, it is possible that some devices have a different way to change the IP address settings

6. Download program to devices

To program the KNX devices of the ETS project, no additional changes are necessary in parameters or group address settings. Simply select the device you want to program, right-click on it and choose “Full download” and wait for the action to complete.



Example: Full download for KNX AC Gateway – Room 101

The KNX devices that require a program download, based on the number of guest rooms or our project are:

- AC Gateway Room X – Gateway device of Room X
- Communication module rooms Y – X LOGO-KNX-MODULE CMK 2000 – Where Y – X indicate a set of 5 rooms, e.g. 6 – 10
- KNX/IP Router of line X – Where X is the KNX line of our project which we will use
- TR/A 1.1 Time Receiver GPS, SM – If we have opted to use the brightness sensor and have it installed in our project



Chameleon

ComfortClick



Comfort Click software is used for the hotel central visualization at reception level. Chameleon HaaS system basic package includes the license type ‘bOS PRO License’ which offers up to 2 different visualization users (e.g. the computer at reception and the hotel owner’s computer).

1. Comfort Click installation instructions

The software must be installed on a computer with a Windows 11 or Windows 10 operating system. The minimum requirements for the computer’s hardware are:

1. CPU frequency 1.0 GHz or higher
2. 4 GB RAM memory or more
3. 64 GB of disk space or more

Please follow the instructions on the manufacturer’s site for installation and licensing of the server:

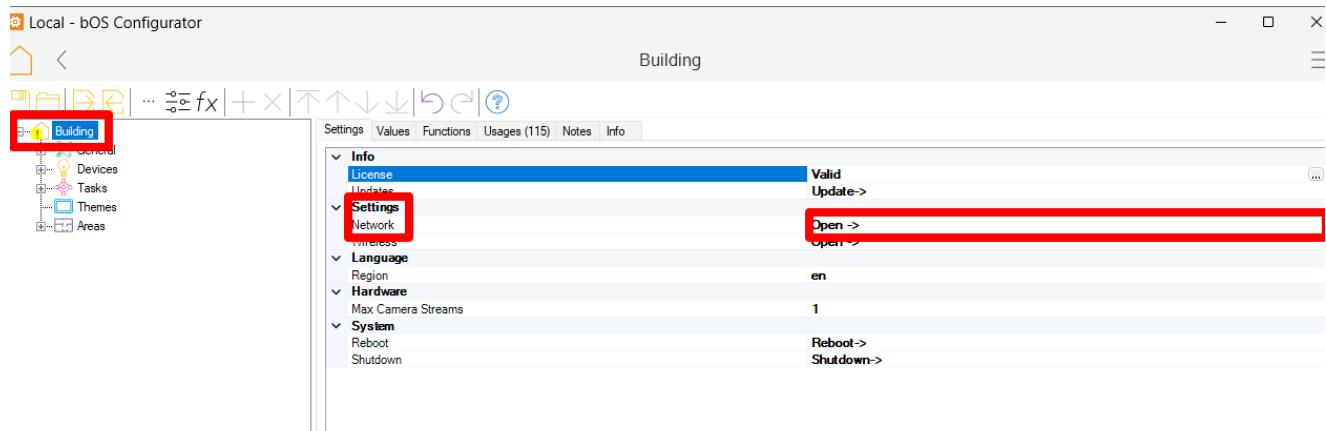
<https://www.comfortclick.com/BOS/Software>

The following applications must be installed:

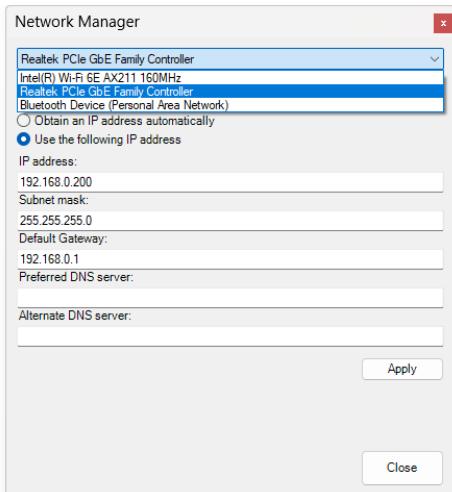
- **bOS Server:** <https://www.comfortclick.com/BOS/Software/BOSServer>
- **bOS Configurator:** <https://www.comfortclick.com/BOS/Software/BOSConfig>
- **bOS Client Windows:** <https://www.comfortclick.com/BOS/Software/BOSClient>

The visualization software **should only be installed** on a computer/server of the hotel and we need to set the IP address to **192.168.0.98**. A change in the IP address of Comfort Click means that we actually change the IP address of the computer/server where the visualization is installed.

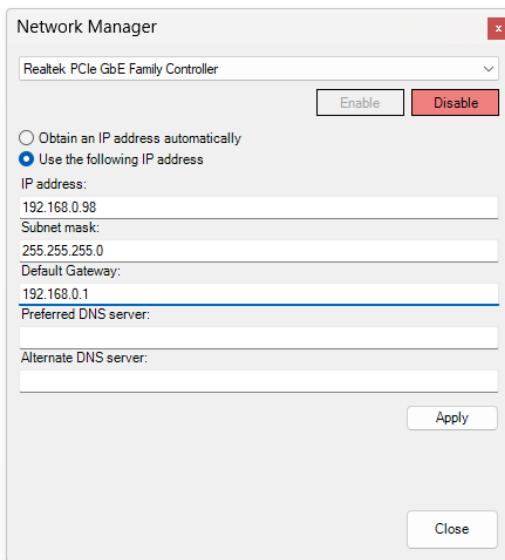
Navigate to “Building/Settings/Network” in Comfort Click configurator and click on network settings.



A pop-up window will appear and we must first choose if we connect with Wi-Fi or ethernet port. It is recommended that the computer running bOS Server uses a fixed LAN IP address.



Choose “Use the following IP Address” and fill the corresponding fields with the following values:
IP address-->192.168.0.98 SubnetMask-->255.255.255.0 Default Gateway-->192.168.0.1



press “Apply” to save the settings.

2. Visualization username and password

A user is already created in the visualization file and has the following login credentials:

- **Username:** OWL
- **Password:** Chameleon2024

A user can use the above credentials to log in to the visualization.

To change the username and password of the visualization, open the ‘**bOS Configurator**’ application, navigate the tree structure on the left pane «**Building -> General -> Users -> User**» and choose «**Change Password**» :



Local - bOS Configurator

User

Building > General > Users > User

Change Password

Setting	Value
Enabled	True
Privileges	Administrator
Username	User
Password	*****
Client Password Warning	True
Language	en
Messaging	[Empty]
API Access	[Empty]
Privileges	[Empty]
Enable Devices	True
Visualization	Areas\Hotel\General\Themes\Hotel

The screenshot shows the 'User' configuration screen in the bOS Configurator. A red box highlights the 'User' node in the tree view. A red arrow points to the 'Change Password' button in the top menu bar. The main panel displays user settings, with the 'Enabled' field set to 'True' and the 'Privileges' field set to 'Administrator'. The 'Password' field is shown as five asterisks. Other settings like 'Language' (set to 'en'), 'Messaging' (empty), and 'API Access' (empty) are also listed.

If we use the default IP addresses of the system, as shown in “**APPENDIX C**”, then we can skip section 3 and 4 of this chapter.

We should make sure that the computer that the visualization is installed on, has an IP address in the range **192.168.0.XXX**

3. Connect to the KNX network

The visualization server communicates with the hotel’s KNX network through a KNX/IP router. To set up the connection between KNX and visualization, we must define the IP address of the KNX/IP router that will be used to communicate with the server.

The IP address of the computer where Comfort Click is installed and the IP address of the KNX/IP router must be in the same range.

Example: If the computer’s address is 192.168.0.11, then the KNX/IP router must have an address in the range 192.168.0.XXX – where XXX is a number up to 255

To define the IP address of the KNX/IP router, navigate the tree structure in the left pane “**Building -> Devices -> KNX**” and write the value in the field “**IP Address**” :

Local - bOS Configurator

KNX

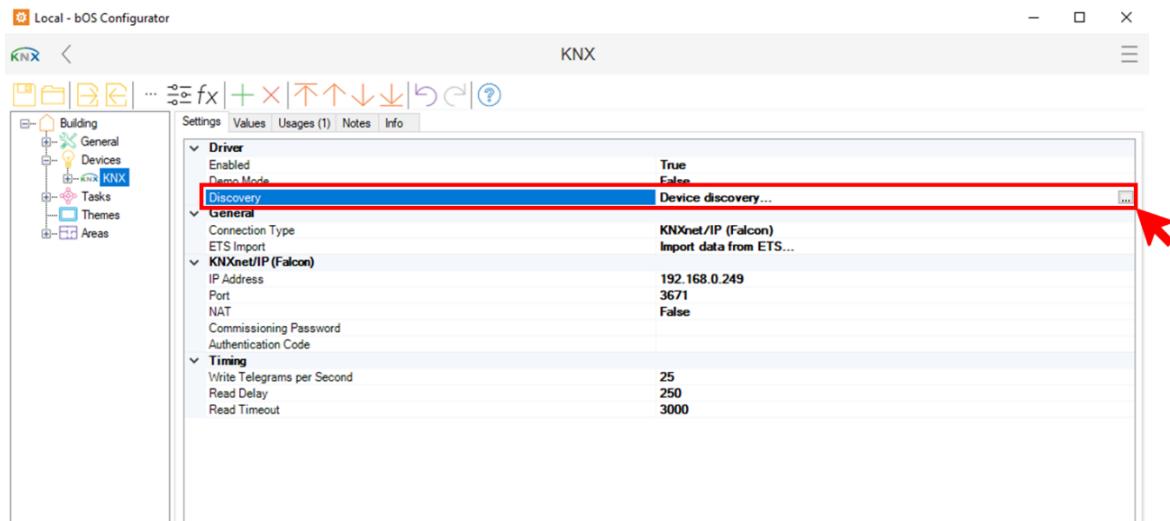
Building > Devices > KNX

IP Address: 192.168.0.249

Setting	Value
Driver	True
Demo Mode	False
Discovery	Device discovery...
General	KNXnet/IP (Falcon)
KNXnet/IP (Falcon)	Import data from ETS...
IP Address	192.168.0.249
Port	3671
NAT	False
Commissioning Password	
Authentication Code	
Timing	25
Write Telegrams per Second	250
Read Delay	3000
Read Timeout	

The screenshot shows the 'KNX' configuration screen in the bOS Configurator. A red box highlights the 'KNX' node in the tree view. A red arrow points to the 'IP Address' field, which is set to '192.168.0.249'. Other settings like 'Driver' (set to 'True'), 'General' (set to 'KNXnet/IP (Falcon)'), and 'Timing' (with values 25, 250, and 3000) are also listed.

There is also the option to automatically search for available KNX/IP router devices on the network by clicking on “Discovery” :



4. Connection of LOGO! room devices

The visualization server communicates with all LOGO! room devices through the IP network. We must configure the IP address of each LOGO! device in the corresponding room of the visualization structure.



The IP address of the computer where Comfort Click is installed and the IP addresses of LOGO! devices must be in the same range.

Example: : If the computer's address is 192.168.0.11, then a LOGO! device must have an address in the range 192.168.0.XXX – where XXX is a number up to 255

To set the IP address of LOGO! device in room X (where X is 101, 102...190), navigate the tree structure in the left pane “Building -> Areas -> Floor 1 -> Room X -> Modbus” and write the address in the field “IP” (See the image on the next page).

Repeat the above procedure for all LOGO! devices and rooms that you want to change the IP address.



Local - bOS Configurator

Modbus

Settings Values Usages (1) Notes Info

Driver

- Enabled True
- Demo Mode False

General

- Command Delay 100
- Read Interval 480
- Timeout 3000
- Address Offset False
- Connection Type TCP

Connection

IP	192.168.0.100
Port	508

Data

- Low Word First False
- Low Byte First False
- Data Format LittleEndian

Error Handling

- Error Handling Reconnect

Functions

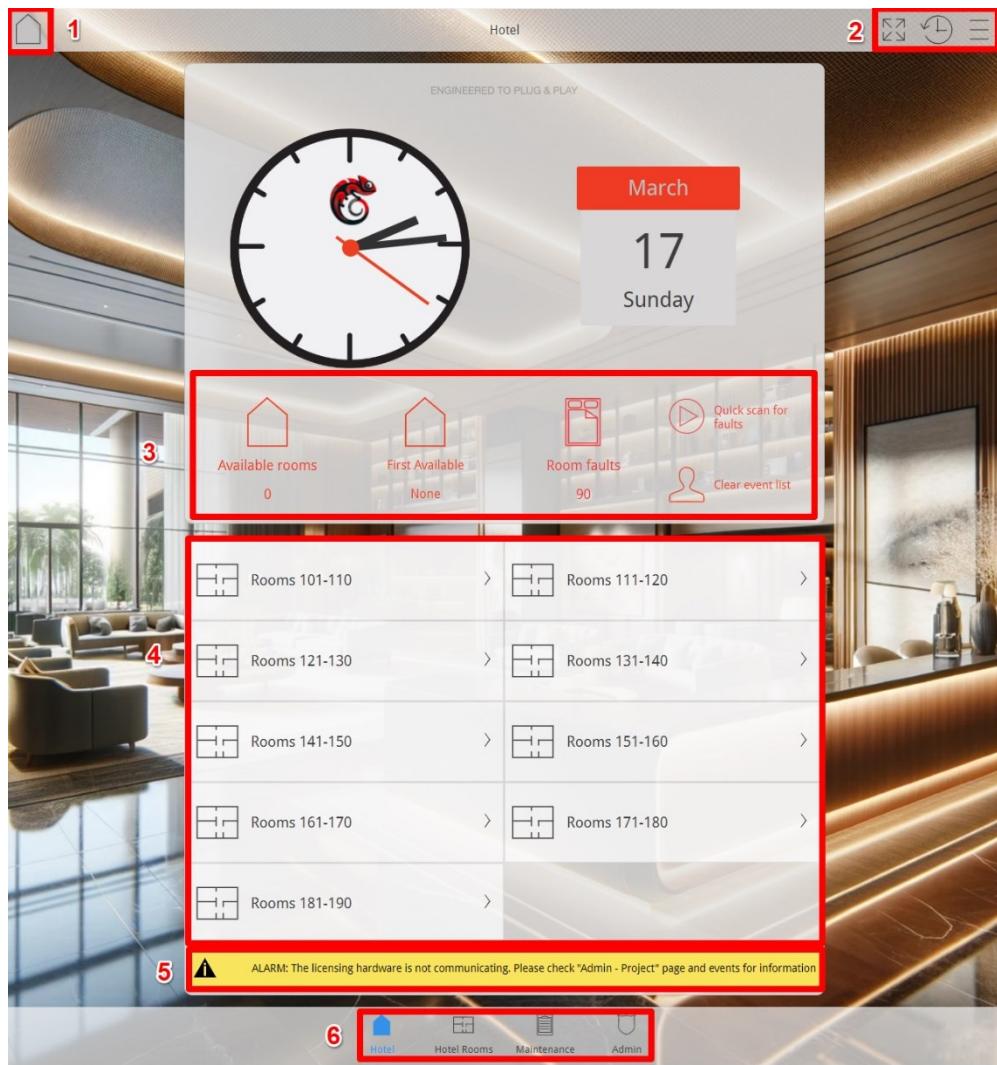
- Write Function Type WriteSingle
- Read Function Type ReadMultiple
- Maximum Read Bytes 240

IP
IP address of the device.

The next section describes the visualization structure that the user will interface with, using a computer and/or smart device. No additional configuration actions are required.

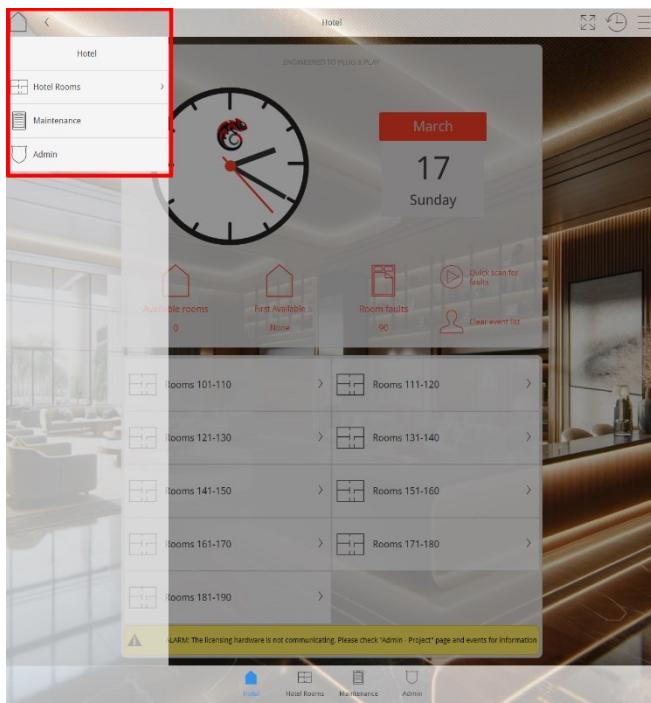
5. Visualization user interface

Main page – HOTEL



Index	Description
1	Menu button that opens the menu with available page options of the visualization to navigate
2	Settings toolbar: Full screen view option, events and alarms log, settings. Additional information in the next pages
3	Quick info toolbar: Available rooms, room faults, quick scan and clear events. Additional information in the next pages
4	Navigation links to rooms overview page, per 10 rooms
5	License status of the system
6	Bottom navigation menu for quick access of visualization pages

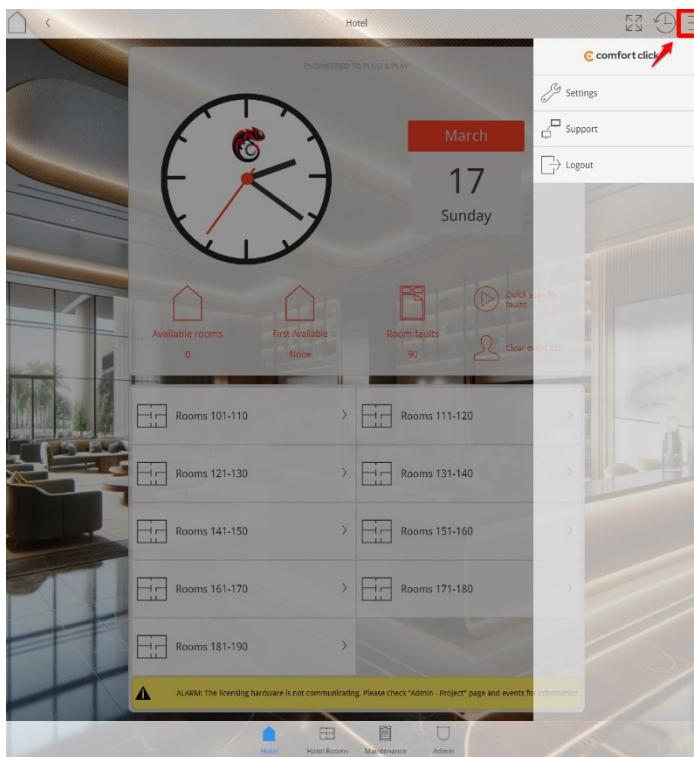
Main page – HOTEL: Image 1 / Menu



Select the icon on the left upper side of the visualization to open the menu with the available pages we can navigate to

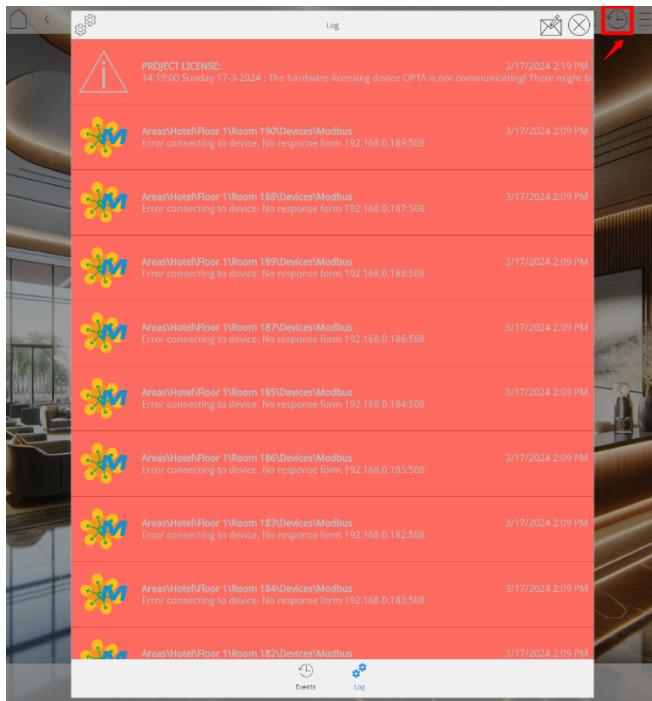
Choose the page you want to navigate and it will be displayed

Main page – HOTEL: Image 2 / Settings menu



Select the 3 horizontal bars icon to open the settings menu, where you can logout and change system settings:

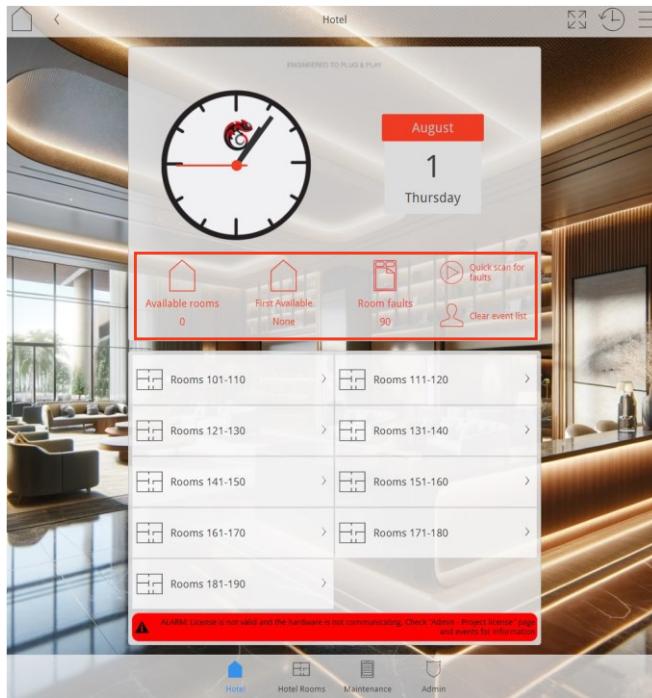
- System language (Chameleon HaaS currently supports English and Greek)
- Change username and password
- Activate remote support – Requires additional license which is not included in the product



Select the watch icon to open the events and alarms log. In this log you can find messages and alarms like:

- Notification that a LOGO! device has been disconnected
- Alarm that an emergency cord has been activated

Main page – HOTEL: Image 3 / Quick info toolbar



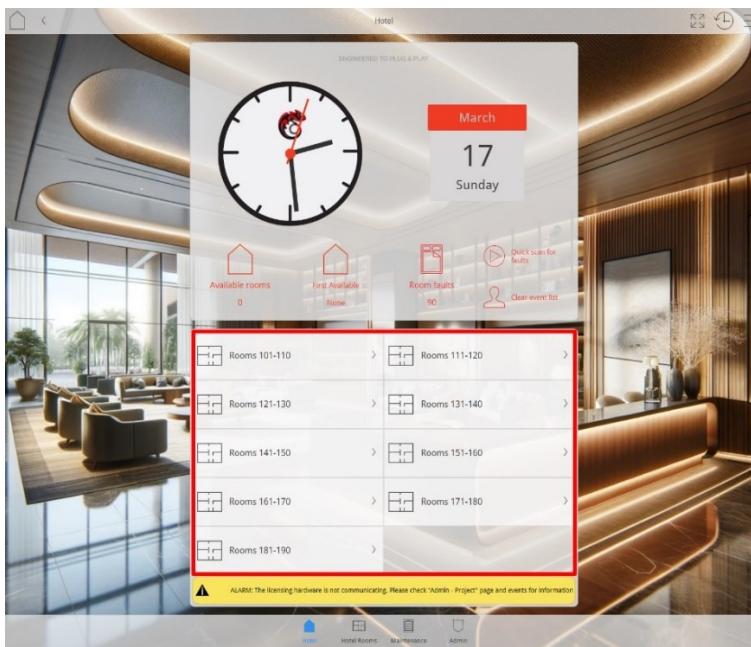
The reception user has a quick and easy way to find information regarding:

1. Number of available guest rooms*
2. First available guest room*
3. The number of LOGO! room devices that have a malfunction
4. Quick scan for faults updates the number of LOGO! devices that have a malfunction
5. Clear event list clears the log file of events. The user and date where this action was taken is saved

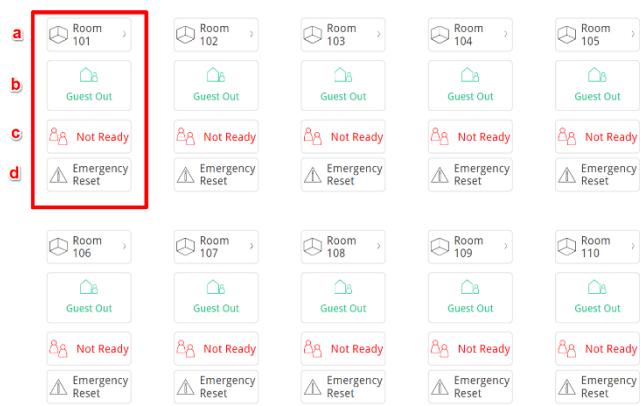
*The information for available rooms is directly connected with «Guest in/out» function, described below. Therefore, the user must always correctly update the status of the room during guest check-in/check-out.



Main page – HOTEL: Image 4 / Navigate to rooms overview page



The links on the main page take us to an overview page of the ten rooms they refer to. As an example, if we click on the link “Rooms 101-110” we navigate to the page shown in the image below

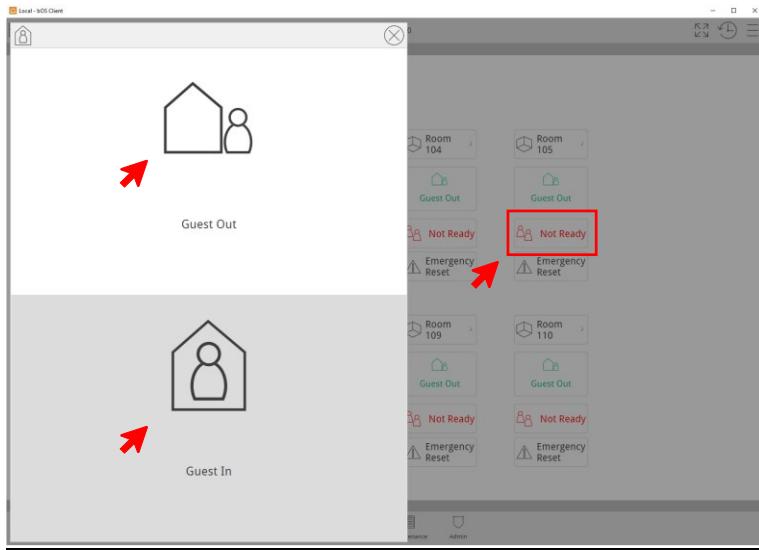


A room overview page displays short information for each room and provides a link to navigate to each room page:

- Navigation link to room page
- Display and change status of room state “Guest in/Guest out” availability*
- Display and change status of room state “Ready/Not ready” for rent*
- Reset emergency cord alarm call – If available in our project

*We will examine the functionality of button b and c in the following image





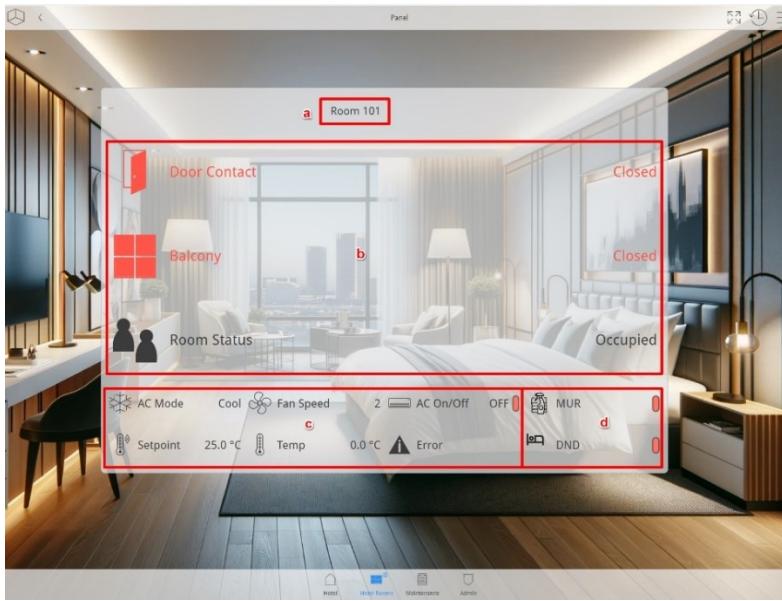
A click on «Guest in / Guest out» button opens a window to set the room state. Example:

- We want to check-in a guest in room 101. If the room is available, then the button “Guest in / Guest out” should display “Guest out”. Click on it and choose “Guest in”.

The system has now updated the room status as unavailable and activates the precooling/preheating scene of this room.

In order to check-in a guest with the procedure we mentioned above, the state (c) of the room must be «Ready», meaning it is clean and ready for rent. This state can be updated by:

1. The hotel cleaning staff presses the “Make up Room” button of the room for 5 seconds, indicating that the room is cleaned and updating the state in the visualization page
2. If no “Make up Room” button is available, the state can be directly changed by the reception staff by clicking on button “Ready/ Not Ready”

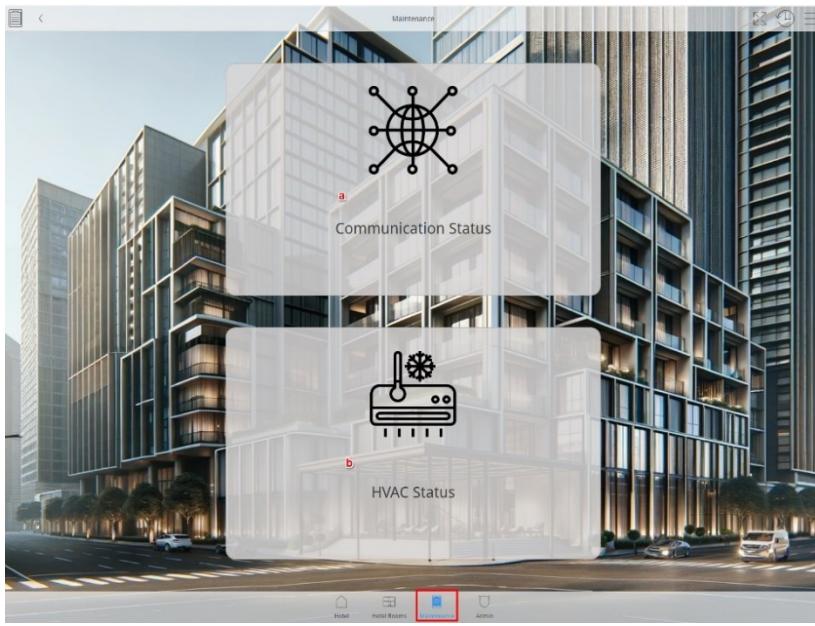


Room Page

If we select the room link in the overview page, we can navigate to the room page. The following information and actions are available:

- a. Room number
- b. Contact signal states:
Room entrance door open or closed
Room window open or closed
Guest presence in the room or vacant
- c. Status and control of A/C unit:
Change mode
Change fan speed
Turn the unit on or off
Change setpoint temperature
Room temperature measurement by the A/C unit
Error code indication of A/C unit
- d. Indication and control of “Make Up Room” and “Do Not Disturb” signals, if available in our project

Maintenance page – Main



The maintenance main page has links for pages to overview the status of project's devices:

- The page "Communication Status" shows the statuses of LOGO!, CMK2000 and A/C gateway devices as well as KNX network connection status
- The page "HVAC Status" shows information about the operation of the A/C units

Maintenance page – Communication status:

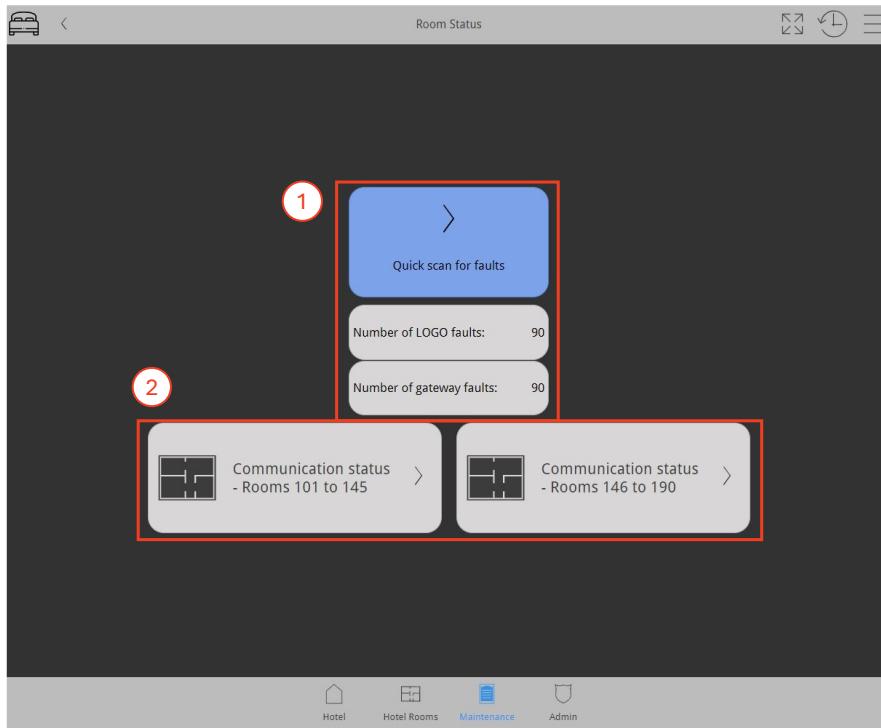


There are two available links in the Communication status page:

The first link will open the room devices communication page, where we will find LOGO! and A/C gateway devices' connection status.

The second link will open the page where we can find the communication status of each device that makes up the topology of our installation, which are the devices that connect the visualization server with the KNX network and the CMK2000 gateways that connect the LOGO! base modules to the KNX network.

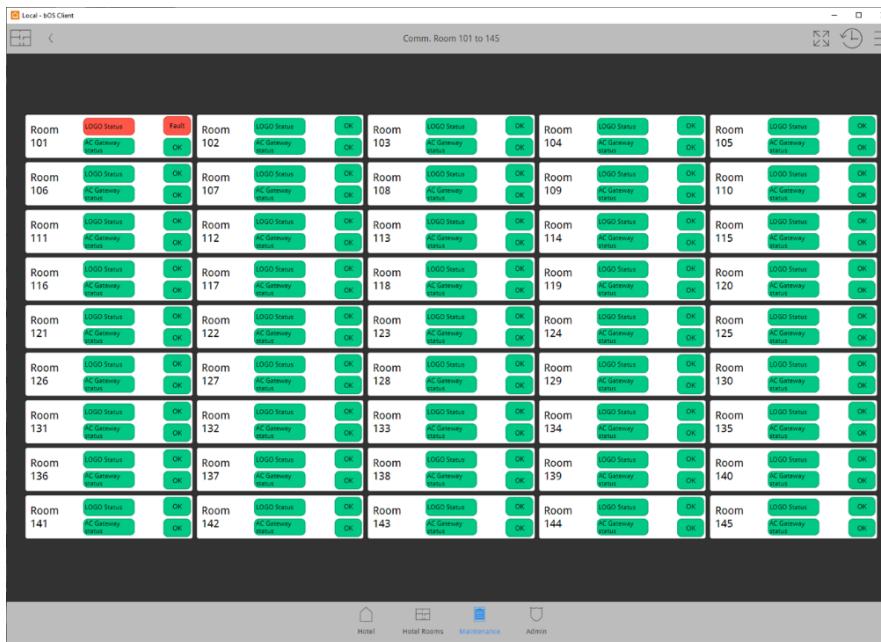
Maintenance page – Maintenance: Communication status: Room Status



The screenshot shows the 'Room Status' section of the maintenance interface. At the top, there's a blue button labeled 'Quick scan for faults'. Below it, two fields show 'Number of LOGO faults: 90' and 'Number of gateway faults: 90'. Two red circles, labeled 1 and 2, point to these areas. Below this, there are two navigation boxes: 'Communication status - Rooms 101 to 145' and 'Communication status - Rooms 146 to 190'. A red box highlights these two boxes. At the bottom, there's a navigation bar with icons for Hotel, Hotel Rooms, Maintenance (which is selected), and Admin.

Room status page contains:

1. **A button to quickly scan for communication faults of LOGO! and A/C gateway devices. When we press the “Quick scan for faults”, the corresponding fields are updated**
2. **Navigation links to room overview page. Details in the image below**

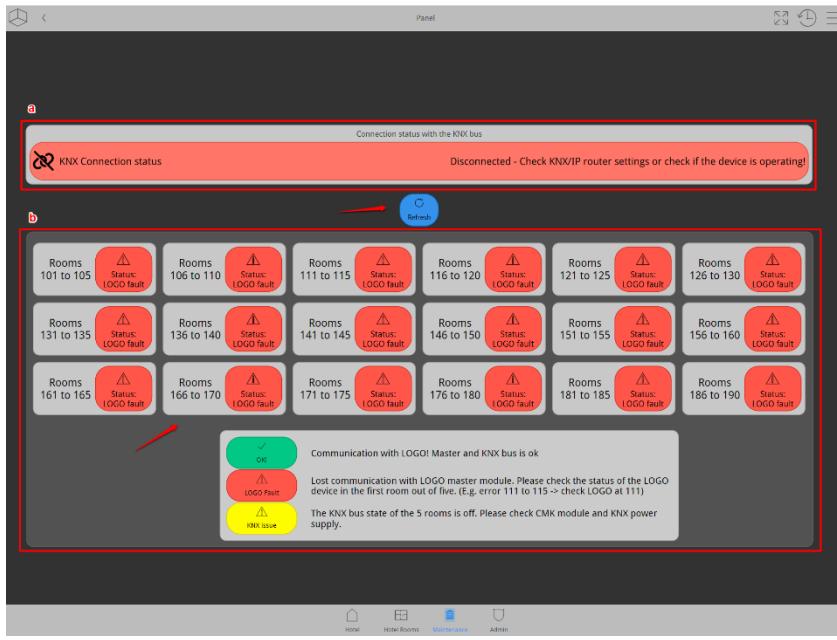


The screenshot shows the 'Comm. Room 101 to 145' page. It displays a grid of room numbers from 101 to 145. Each room row contains a table with two columns: 'LOGO Status' and 'AC Gateway Status'. Each table cell contains a green button labeled 'OK' or a red button labeled 'Fault'. The 'OK' buttons have a small 'OK' icon, while the 'Fault' buttons have a small 'X' icon. The entire grid is highlighted with a red box.

Room	LOGO Status	AC Gateway Status	Room	LOGO Status	AC Gateway Status	Room	LOGO Status	AC Gateway Status	Room	LOGO Status	AC Gateway Status
101	OK	Fault	102	OK	OK	103	OK	OK	104	OK	OK
106	OK	OK	107	OK	OK	108	OK	OK	109	OK	OK
111	OK	OK	112	OK	OK	113	OK	OK	114	OK	OK
116	OK	OK	117	OK	OK	118	OK	OK	119	OK	OK
121	OK	OK	122	OK	OK	123	OK	OK	124	OK	OK
126	OK	OK	127	OK	OK	128	OK	OK	129	OK	OK
131	OK	OK	132	OK	OK	133	OK	OK	134	OK	OK
136	OK	OK	137	OK	OK	138	OK	OK	139	OK	OK
141	OK	OK	142	OK	OK	143	OK	OK	144	OK	OK

Room overview page displays the connection status of each LOGO! and A/C gateway device. If a device has lost communication, the display will be red and the information text will show “Fault”

Maintenance page – Maintenance: Communication Status: KNX/CMK

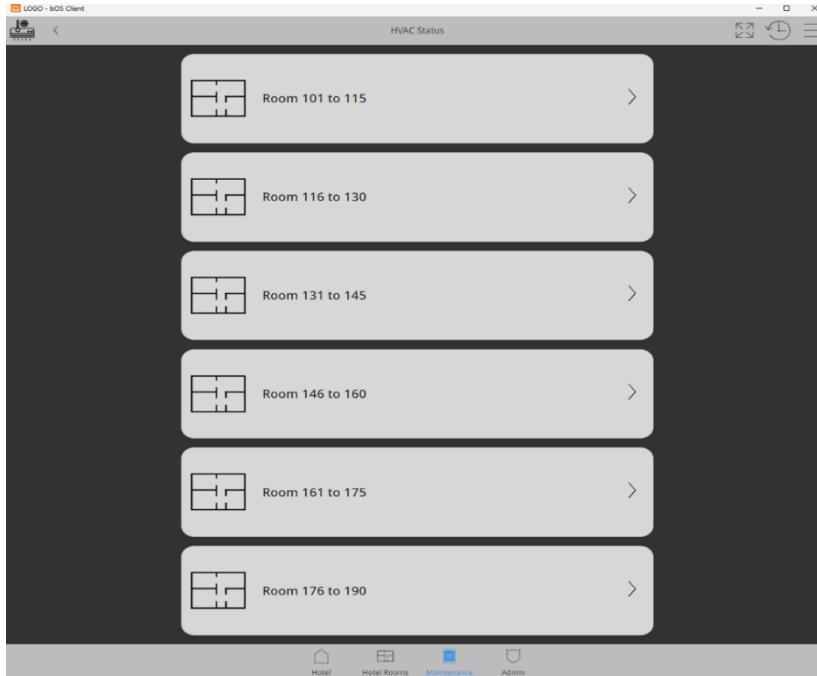


The KNX/CMK communication status page displays:

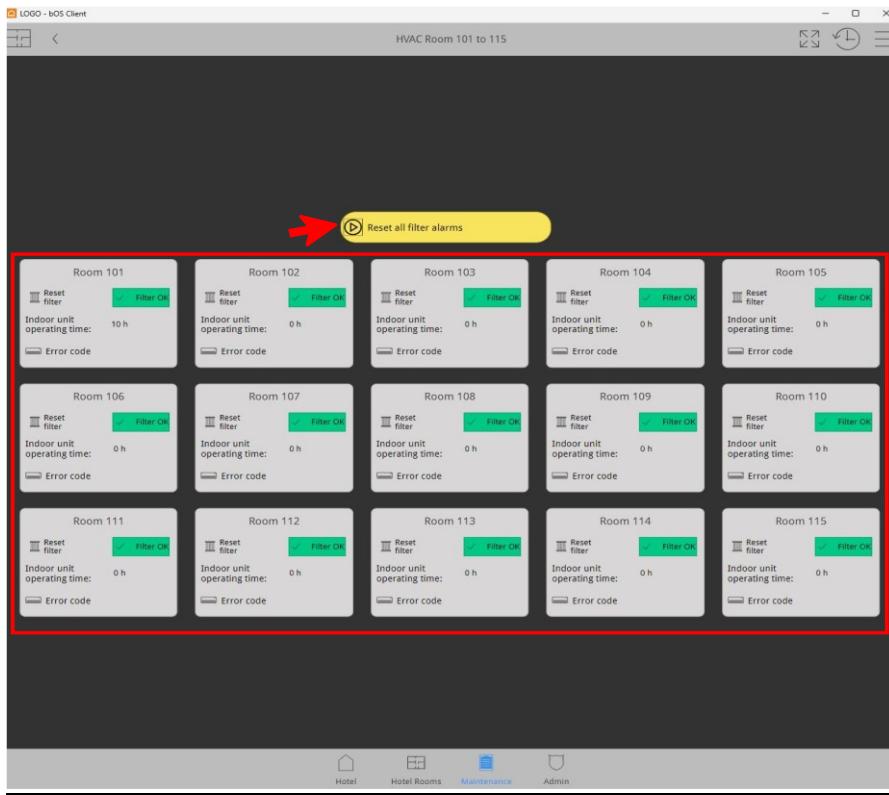
- a. **The connection status between the visualization and KNX. The visualization server communicates through an IP/KNX router with the KNX network, which means if this connection is down, the visualization will not operate correctly.**
- b. **The connection status of CMK2000 gateways. One CMK2000 per 5 rooms is used for LOGO! to KNX communication. This page monitors the status of these gateways for every set of 5 rooms.**

A “Refresh” button is also available which performs a quick scan for faults and updates the status of each CMK2000 gateway.

Maintenance page – Maintenance: HVAC Status:



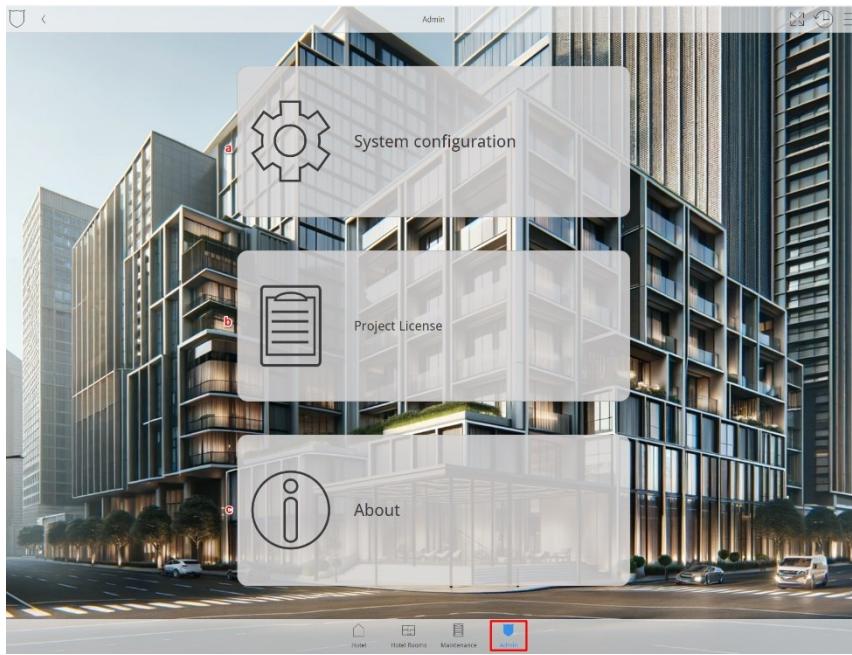
In the HVAC Status page there are navigation links for room overview, per 15 rooms. Details for the overview page can be found in the image below.



The room overview page for HVAC status displays information regarding the A/C unit of each room. The available information is:

- Notification if the filter of an A/C unit needs cleaning. Each unit, depending on the operation hours, provide an alarm that their filter needs changing. In this page, we can quickly view which unit requires a filter change
- Operating time of the A/C unit. This value lets us know how long the unit has been operating. The time resets on the 1st of each month
- Error indication for each A/C unit. Each unit provides an error text code, in case of a fault. This error code can help us notify the installer/service staff to quickly diagnose and repair the fault

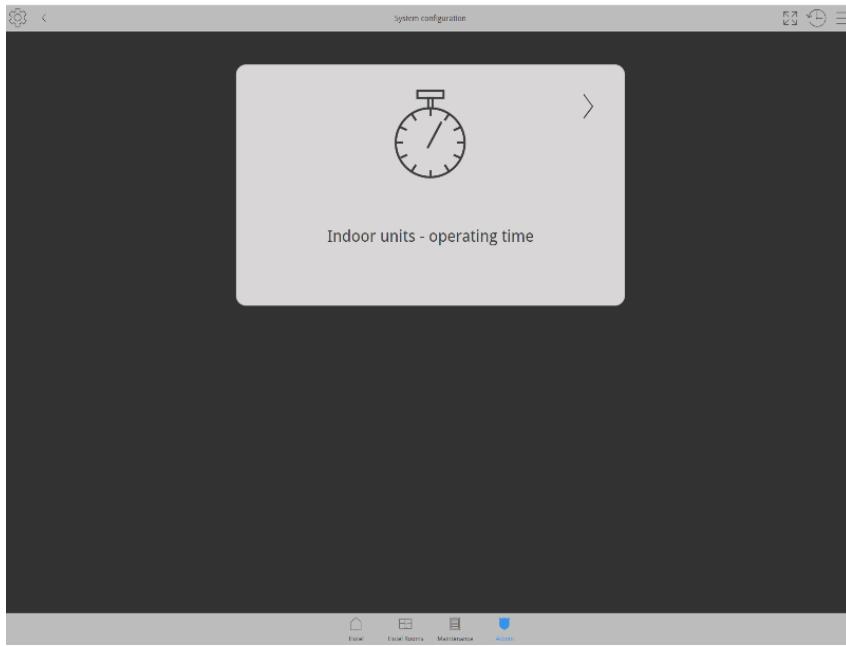
Admin page – Main



Admin page contains navigation links for pages that enables us to change certain system parameters and display system information:

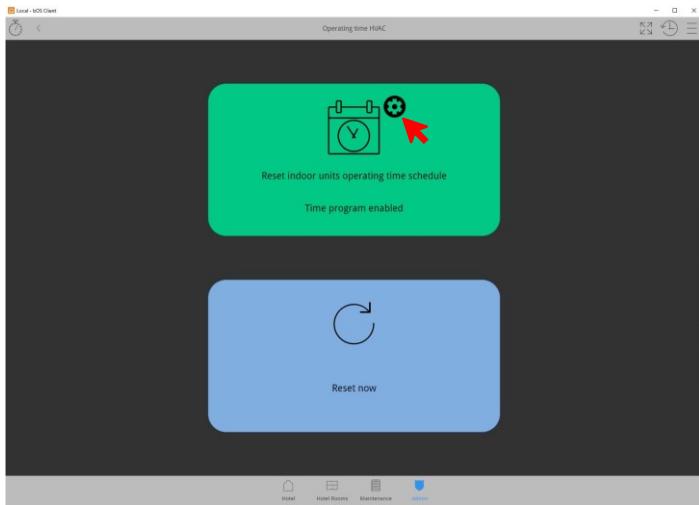
- The link “System configuration” will open a page where we can change certain system parameters
- The link “Project License” will open a page that displays information regarding the license of the system
- The link “About” will open a page that displays information about the version of the system and hardware resources the visualization server uses

Admin page – Admin: System configuration



The System configuration page contains the following link:

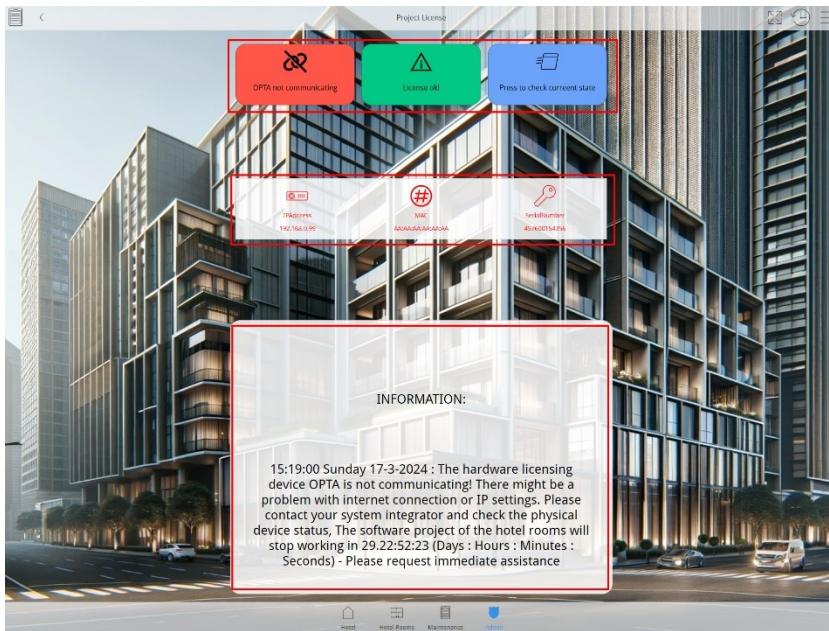
- Indoor units – operating time:** If we follow this link, a page where we can reset the A/C units' operating times will open as well as set a schedule for resetting the times automatically.



If we click on the gear icon, we can set a new time schedule where the operating times of the A/C units will reset automatically.

If we click on “Reset now” button, the operating times of all A/C units will reset immediately.

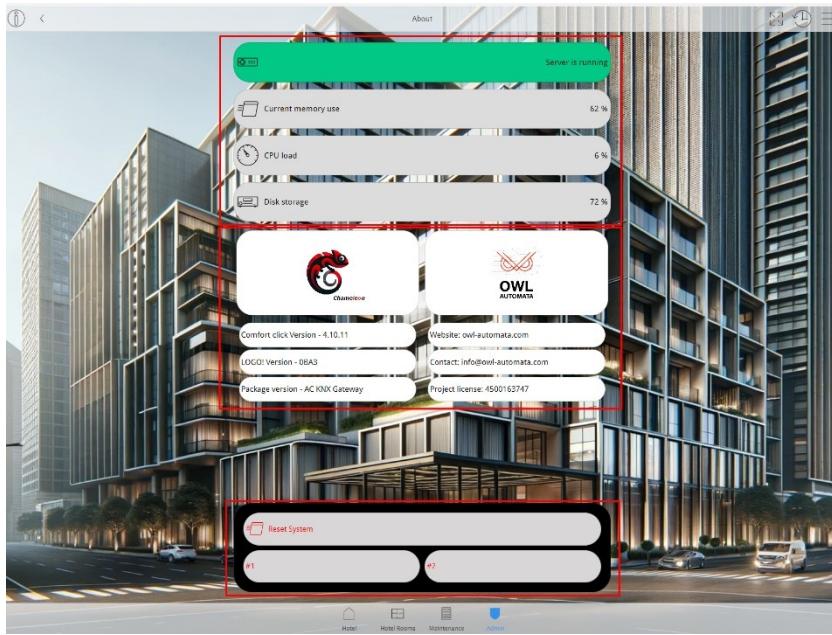
Admin page – Admin: Project License



The page “Project License” displays information regarding project license:

- The status of the licensing device (OPTA)
- The IP address and the MAC address of OPTA as well as the serial number of the project license
- An information message that will display a message if a fault occurs with OPTA. The message will display the time the fault happened and how many days we have to replace it, before the system stops operating

Admin page – Admin: About



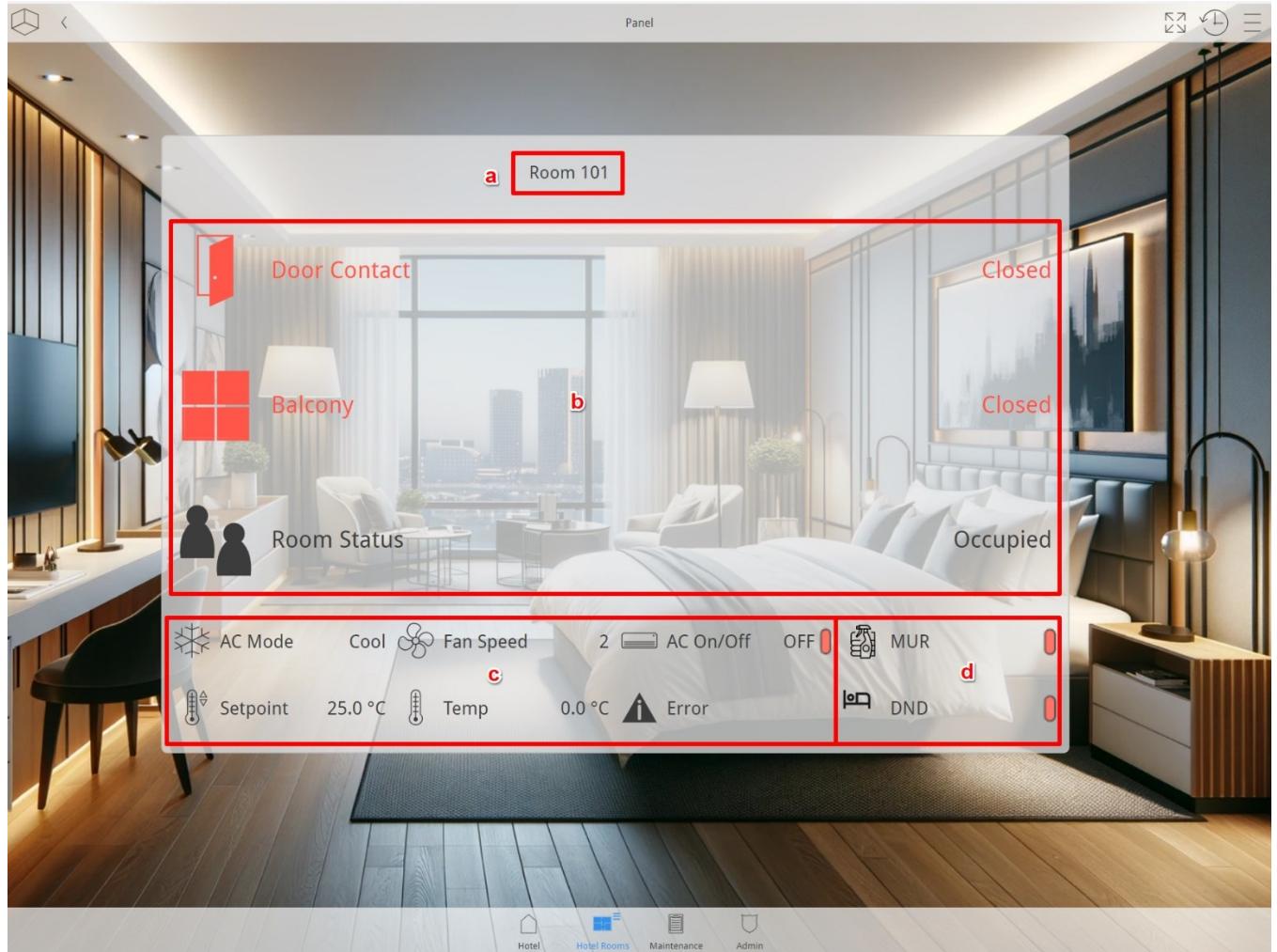
The About page displays information about the version and resources of the visualization:

- If the visualization software is running, we should see the message “Server is running”. Otherwise, if the software has stopped, we should see a red box message showing an error
- Information about the hardware resources the visualization server uses. A quick look can help us understand if our computer meets the minimum requirements for the visualization software
- Information about the versions of the software used in Chameleon HaaS system
- System total reset command. This action requires a password to run (password: 1789) – **Only run this after consulting the supplier!**

6. Visualization alterations

The design of a hotel guest room with LOGO! Hotel Configurator software will lead to a visualization project that has a combination of housekeeping functions (MUR/DND, emergency cord – EC). Therefore, it is necessary to adjust each room overview page as well as each guest room page.

The following changes will be applied in each guest room page:



Field “a” will display the room name, with our preferred room number(if we want to change the default numbers), e.g. 1001 instead of 101. **Field “b” and “c” will remain unchanged.** Field “d” will display the housekeeping services, in the combination we chose during our room design (e.g. we might have only MUR or nothing at all).



In the room overview page, fields “b”, “c” will be displayed as they are in any combination. However, button “c” (Ready/Not Ready) has the following functionality depending on your configuration:

- If a “Make Up Room” button is present in guest room configuration, the hotel cleaning staff can press it for 5 seconds to notify the central visualization that the room is clean. In this case, the “c” field displays only the status and cannot be used by the reception staff to change the state.
- If there is no “Make Up Room” button in guest room configuration, the state “Ready/ Not Ready” of the room changes from the reception staff by clicking on the “c” button.

Navigation link button “a” will have an updated room number(if required) and button “d” will only be present if we have an emergency cord (EC) in guest room configuration.

The screenshot shows a grid of room status cards. Room 101 is highlighted with a red box and labeled 'a'. Below it, four buttons are labeled 'b', 'c', and 'd' with corresponding icons: Guest Out, Not Ready, and Emergency Reset. The other rooms (102-110) are shown without these additional controls.

Room	Status	Action
101	Guest Out	Not Ready Emergency Reset
102	Guest Out	
103	Guest Out	
104	Guest Out	
105	Guest Out	
106	Guest Out	
107	Guest Out	
108	Guest Out	
109	Guest Out	
110	Guest Out	

Finally, all visualization pages will display the rooms that are present in the hotel (e.g. 63, not 90) and will have the room numbers we requested.

To update the guest room numbers, we can use the excel sheet available in software tools, "Room number List.xlsx". We need to fill column "C" (choose the TAB "English" if that is your preferred language) with our new room numbers and send this file, along with the exported files from LOGO Hotel Configurator in our visualization request email.

	A	B	C	D
1	Index	Default room numbers	New numbering	New room numbers
2	1	101		101
3	2	102		102
4	3	103		103
5	4	104		104
6	5	105		105
7	6	106		106
8	7	107		107
9	8	108		108
10	9	109		109
11	10	110		110
12	11	111		111
13	12	112		112
14	13	113		113
15	14	114		114
16	15	115		115
17	16	116		116
18	17	117		117
19	18	118		118
20	19	119		119
21	20	120		120
22	21	121		121
23	22	122		122
24	23	123		123
25	24	124		124
26	25	125		125
27	26	126		126
28	27	127		127
29	28	128		128
30	29	129		129
31	30	130		130
32	31	131		131
33	32	132		132
34	33	133		133
35	34	134		134
36	35	135		135
37	36	136		136



Chameleon

OPTA

1. CONNECTION AND TECHNICAL DATA OF FINDER OPTA LITE

Finder OPTA is a programmable logic controller (PLC), can be installed on din-rail (35mm) and requires 12...24 V DC power supply for operation. On the front side of the device, there are 4 status LEDs, a reset LED and 2 buttons that are used to activate certain functions of OPTA. An RJ45 port is available to connect to an ethernet IP network, as well as a USB-C connection port that is used to communicate with a computer for programming. Images 1 and 2 show the connection and user interface features:

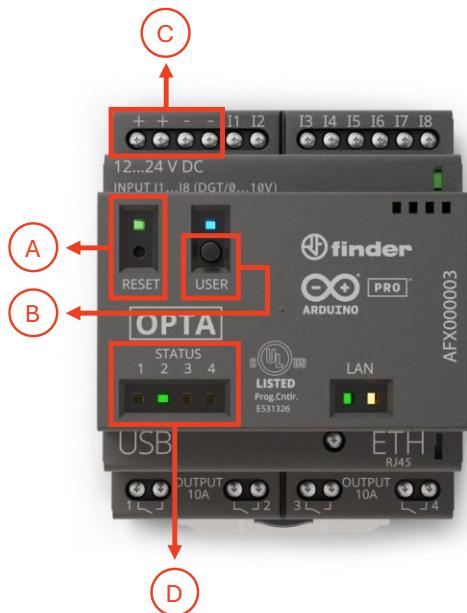


Image 1

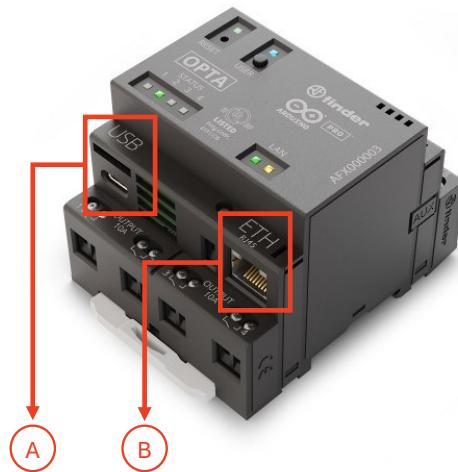


Image 2

Point A: Reset LED reset button

Point B: User button

Point C: Power supply connection 12...24 V DC

Point D: Status LEDs 1 to 4

Point A: USB-C connection port for programming via computer

Point B: RJ45 port for ethernet network connection

You can find the device's maximum consumption on the table below, to assist you on choosing the correct power output for your DC power supply:

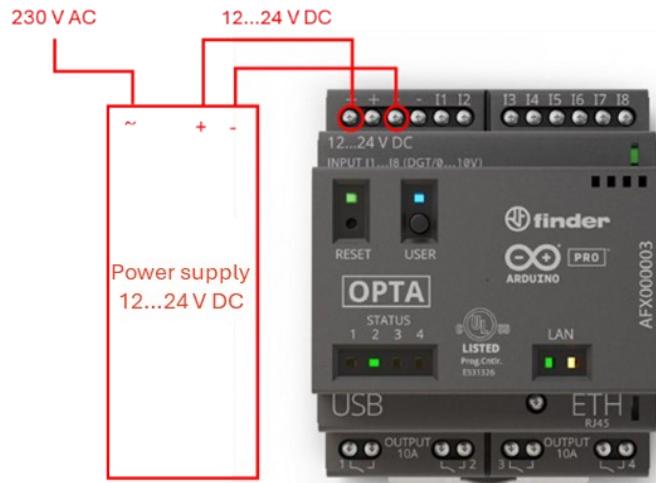
Power supply	Max consumption
12 V DC	2 Watt
24 V DC	2.2 Watt

2. DEVICE PROGRAMMING – REQUEST PROJECT LICENSE

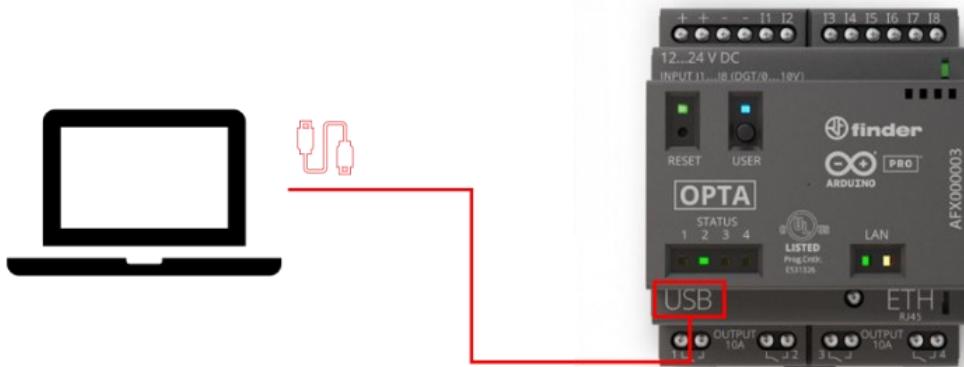
The programming of OPTA is done entirely through “**Chameleon License Loader**” software tool, located in “**License Loader**” folder (run the setup file to install the software). The following steps provide detailed instructions to program and commission the device:

2.1 Step 1 : Connect OPTA to the power supply and your computer. You need to:

- i. Connect the 12...24 V DC power supply output to the (+) and (-) terminals. There are two available (+) and (-) terminals, you only have to connect to one of them (we can choose the one that better suits our installation, it does not affect device operation)



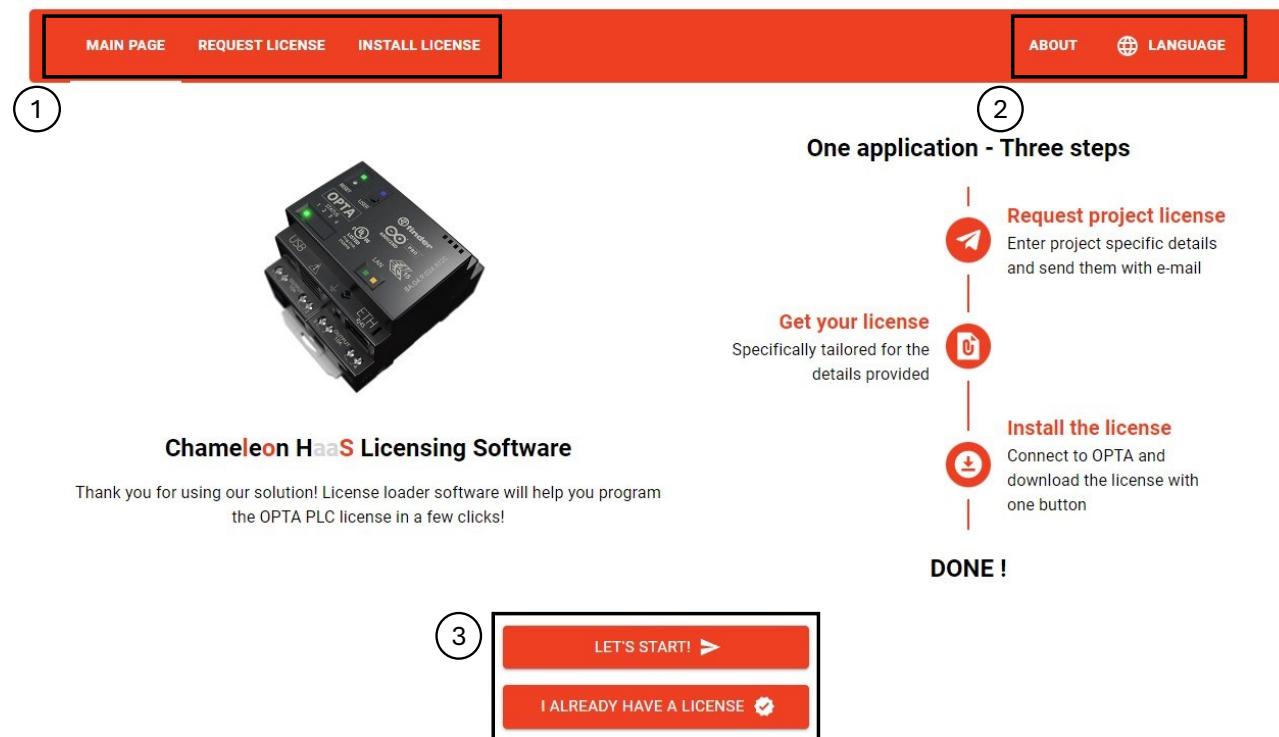
- ii. Connect our computer with a USB cable to the **USB-C** port of OPTA



2.2. Step 2 : On our computer we navigate to the “**License Loader**” folder, which is located in the files we have downloaded. Inside the folder we locate the “**Chameleon License Loader setup x64.exe**” file. We double click the folder to install the program and follow the instructions

If the software installation was successful, we should find a shortcut for “**Chameleon License Loader**” on our desktop (except if chose not to create a shortcut). Use this shortcut to open the application.

2.3. Step 3 : The application opens on the introduction page (if we accepted the Terms of Service), where the following options are available:



- Point 1:** Navigation tabs for application pages
- Point 2:** Change application language and about information for the software
- Point 3:** Start licensing procedure – go to Request license page
Install license file to OPTA – go to install license page



2.4. Step 4 : Click on “**LET’S START!**” to go to the first step for requesting a license file for our project:

MAIN PAGE REQUEST LICENSE INSTALL LICENSE ABOUT LANGUAGE

1 2 3 4 5

Enter project serial number Install OPTA libraries Program OPTA Retrieve MAC address e-mail license request

① The project serial number should be a 10 digit code that you received when you purchased Chameleon. Its format should be HC.CC.ASU.x.x.x.x.xxxxxx

Required SAVE ✓

Project Serial Number

② ③ RESET STEP SKIP NEXT

Point 1: Steps we have to complete to request a project license
Point 2: Step navigation buttons
Point 3: Reser, skip and next step buttons

To create our unique project license request, we have to complete all 5 steps in the corresponding order.
Detailed instructions on how to complete each step can be found in the following sections.

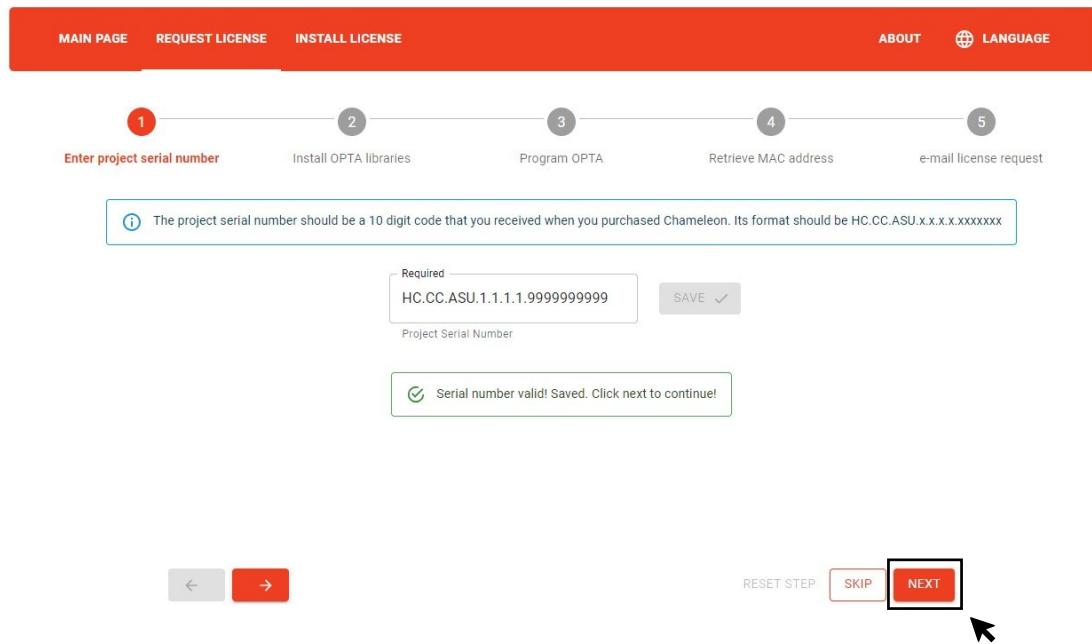


A confirmation message that our action was completed successfully appears after completing each step, enabling the “**NEXT**” button, allowing us to move to the next step



If we want to repeat a step after completing it (if we want to enter a new value for example), then we can click on “**RESET STEP**”.

2.5. Step 5 : “Enter project serial number”. In this step, we have to fill the form with the serial number that we received when we purchased the system. The format of the serial number should be HC.CC.ASU.x.x.x.x.xxxxxxx. Click on “**SAVE**” button and a confirmation message should appear, if the format of the serial number is correct:



MAIN PAGE REQUEST LICENSE INSTALL LICENSE

ABOUT LANGUAGE

1 Enter project serial number 2 Install OPTA libraries 3 Program OPTA 4 Retrieve MAC address 5 e-mail license request

(i) The project serial number should be a 10 digit code that you received when you purchased Chameleon. Its format should be HC.CC.ASU.x.x.x.x.xxxxxxx

Required
HC.CC.ASU.1.1.1.1.9999999999

Project Serial Number

SAVE ✓

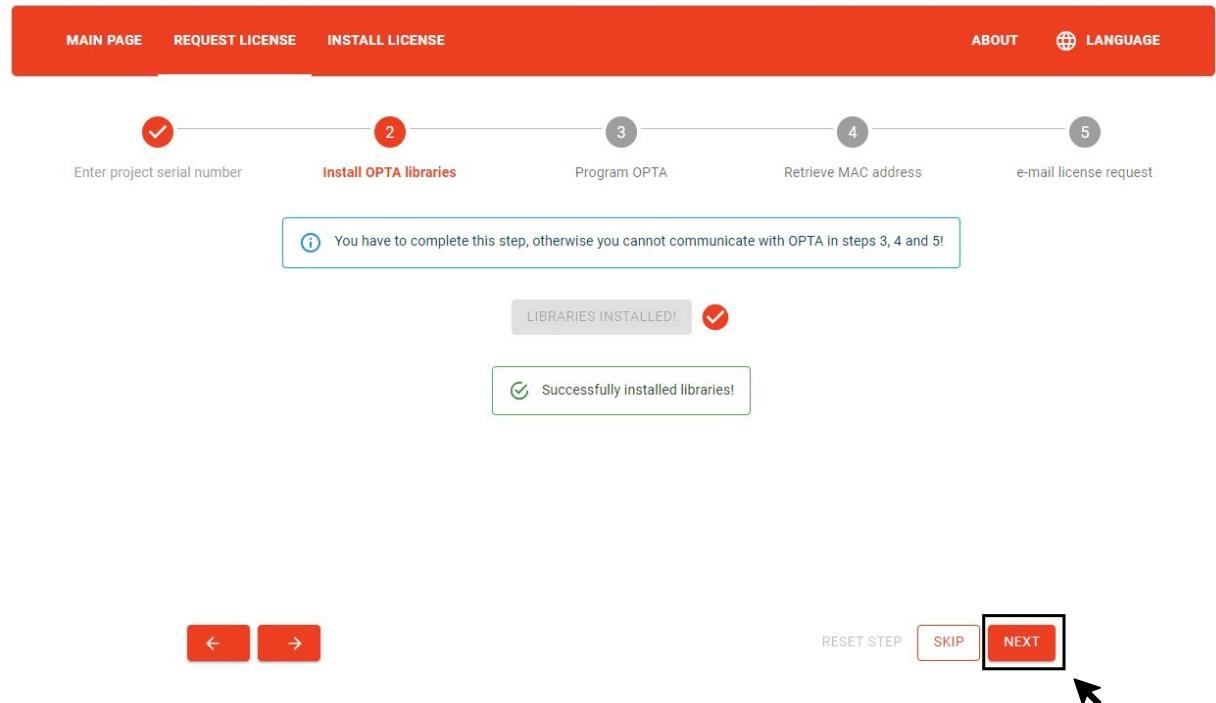
Serial number valid! Saved. Click next to continue!

← →

RESET STEP SKIP NEXT

Click on “**NEXT**” to continue.

2.6. Step 6 : “Install OPTA libraries”. In this step, we simply click on “**INSTALL OPTA LIBRARIES**” and wait until the action is finished. After getting a confirmation message that our action was successful, we can click on “**NEXT**” to continue.



MAIN PAGE REQUEST LICENSE INSTALL LICENSE

ABOUT LANGUAGE

1 Enter project serial number 2 Install OPTA libraries 3 Program OPTA 4 Retrieve MAC address 5 e-mail license request

(i) You have to complete this step, otherwise you cannot communicate with OPTA in steps 3, 4 and 5!

LIBRARIES INSTALLED! ✓

Successfully installed libraries!

← →

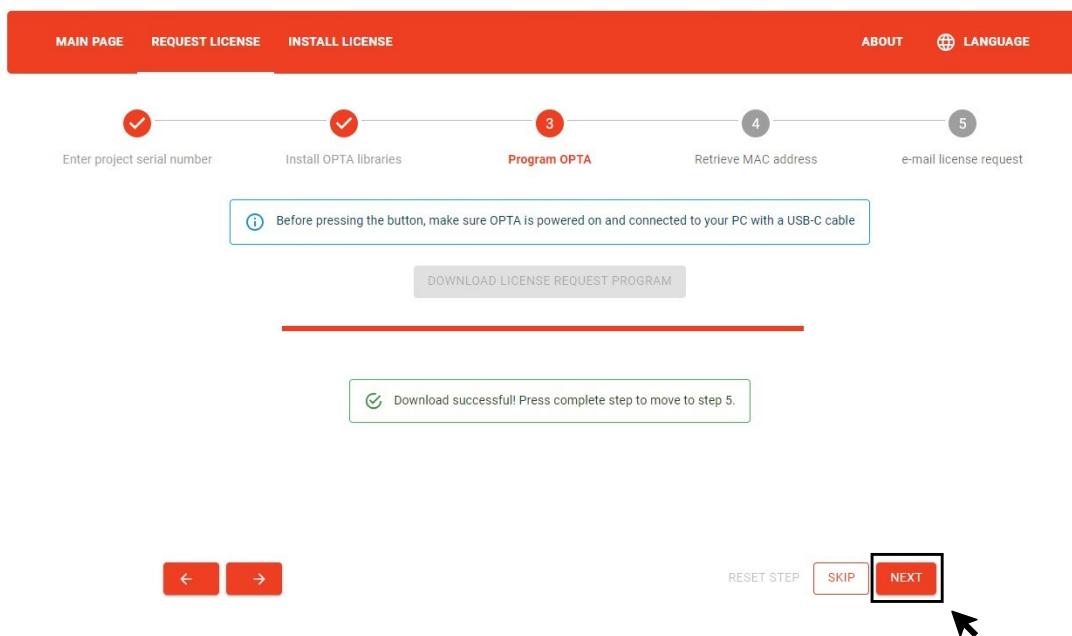
RESET STEP SKIP NEXT



2.7.Step 7 : “Program OPTA”. In this step, we simply click on “**DOWNLOAD LICENSE REQUEST PROGRAM**” and wait until the action is finished. After getting a confirmation message that our action was successful, we can click on “NEXT” to continue.



ATTENTION! OPTA must be powered on and be connected to our computer via a USB-C cable to complete this step



If step “**Program OPTA** ” completes successfully, the 4 status LEDs on the front of the device should start blinking. This indicates that the step was completed correctly and the device was programmed.





2.8. Step 8 : “Retrieve MAC address”. In this step, we simply click on “**READ OPTA MAC ADDRESS**” and wait until the action is finished. After getting a confirmation message that our action was successful, we can click on “NEXT” to continue.



ATTENTION! OPTA must be powered on and be connected to our computer via a USB-C cable to complete this step

[MAIN PAGE](#)[REQUEST LICENSE](#)[INSTALL LICENSE](#)[ABOUT](#)[LANGUAGE](#)

Enter project serial number



Install OPTA libraries



Program OPTA



Retrieve MAC address



e-mail license request



Before pressing the button, make sure OPTA is powered on and connected to your PC with a USB-C cable. If you completed steps 3 and 4 then the 4 LEDs of the device should blink.

[READ OPTA MAC ADDRESS](#)

Success! Your OPTA MAC address is: [REDACTED]

[RESET STEP](#)[SKIP](#)[NEXT](#)

If step “**Retrieve MAC address**” completes successfully, the confirmation message should also show the MAC address of OPTA we have in our project.

2.9. Step 9 : “e-mail license request”. This is the last step in the procedure for requesting a project license. The table shows the details of our project:

- Project serial number
- Number of hotel rooms (additional rooms if this is an expansion project)
- New project or expansion
- OPTA MAC address



ATTENTION! Carefully review the details of the table since these details will be used to create a project license! If some information is wrong, the request might be denied or the license file we receive might not work for our project!

After reviewing table information, click on “**SEND E-MAIL**”. This button opens our default e-mail client, which we will use to send the license request.



MAIN PAGE REQUEST LICENSE INSTALL LICENSE

ABOUT LANGUAGE



Enter project serial number



Install OPTA libraries



Program OPTA



Retrieve MAC address

5

e-mail license request

Please review the details in the table! If everything is ok, press "send e-mail" button. **If a value is not set, you cannot send e-mail.**

Project details	Value
Project serial number	<input type="text"/>
Number of hotel rooms	11
New project	Yes
OPTA MAC address	<input type="text"/>



RESET STEP

SKIP

SEND E-MAIL



After clicking on "**SEND E-MAIL**", if all steps are completed, a page informing us that the procedure was completed successfully should appear. We can either click on "**START OVER**" to repeat the procedure, or click on "**GO TO INSTALL LICENSE**" to continue to license installation:

MAIN PAGE REQUEST LICENSE INSTALL LICENSE

ABOUT LANGUAGE



Enter project serial number



Install OPTA libraries



Program OPTA



Retrieve MAC address



e-mail license request



All steps completed! You will soon receive an e-mail with a license file for your project!
Make sure you sent the e-mail with your project details!

START OVER

GO TO INSTALL LICENSE



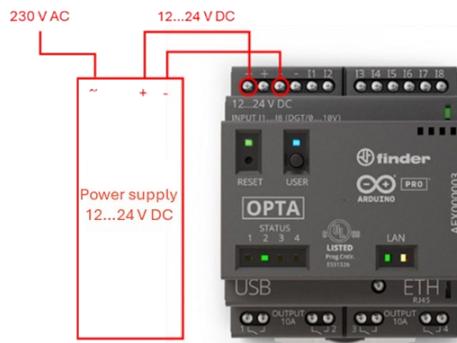
The information message lets us know that we will soon receive an e-mail with our project license file. To complete the license installation of our project, we must have this file!

3. DEVICE PROGRAMMING – ACTIVATE PROJECT LICENSE

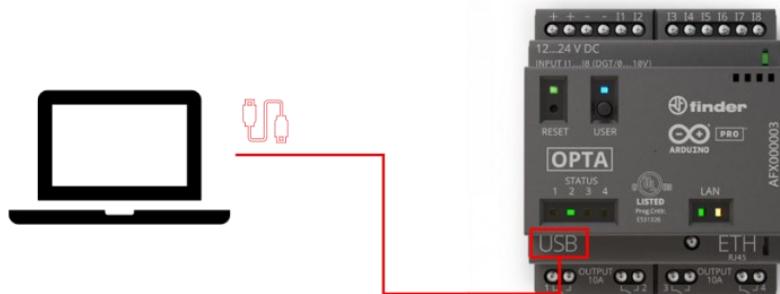
If all steps of section 2 are completed and the project details are valid, we will receive a license file named “***main.ino.bin***”. We will use that file in application “***Chameleon License Loader***” to license our project.

3.1. Step 1 : Connect OPTA to the power supply and your computer. **The device must also be connected to the IP network of the project with an ethernet cable**. You need to:

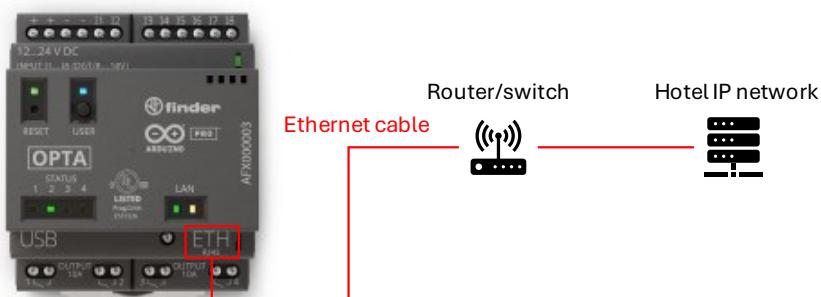
- i. Connect the 12...24 V DC power supply output to the (+) and (-) terminals. There are two available (+) and (-) terminals, you only have to connect to one of them (we can choose the one that better suits our installation, it does not affect device operation)



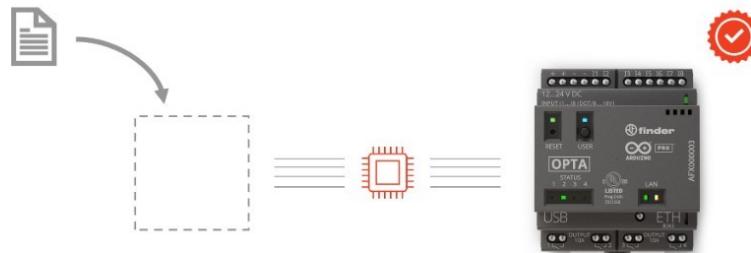
- ii. Connect our computer with a USB cable to the USB-C port of OPTA



- iii. Connect the device to the IP network of the hotel with an ethernet cable via the RJ45 port



3.2. Step 2 : Open the application and navigate to page “**INSTALL LICENSE**” :



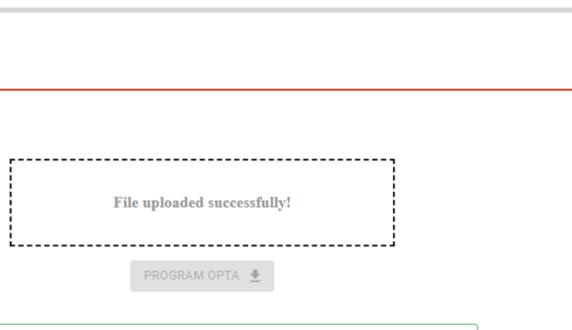
Upload the license file you received via e-mail and press program OPTA button to complete the installation!
Make sure OPTA is powered on and connected to your PC with a USB-C cable



Drag and drop the file into the dashed box or just click inside the dashed box to browse for your file in your folders and open it. As soon as the file is loaded, the button “**PROGRAM OPTA**” will be activated. We click on it and wait for the installation to complete.



ATTENTION! OPTA must be powered on and be connected to our computer via a USB-C cable to complete this step



After the programming of the device is completed, we can safely remove the USB-C cable from OPTA and close “**Chameleon License Loader**” application. The device is now ready and the project licence is active.



Chameleon HaaS system requires a license to operate. If no valid license is present in a project, **the system will stop functioning after 30 days**

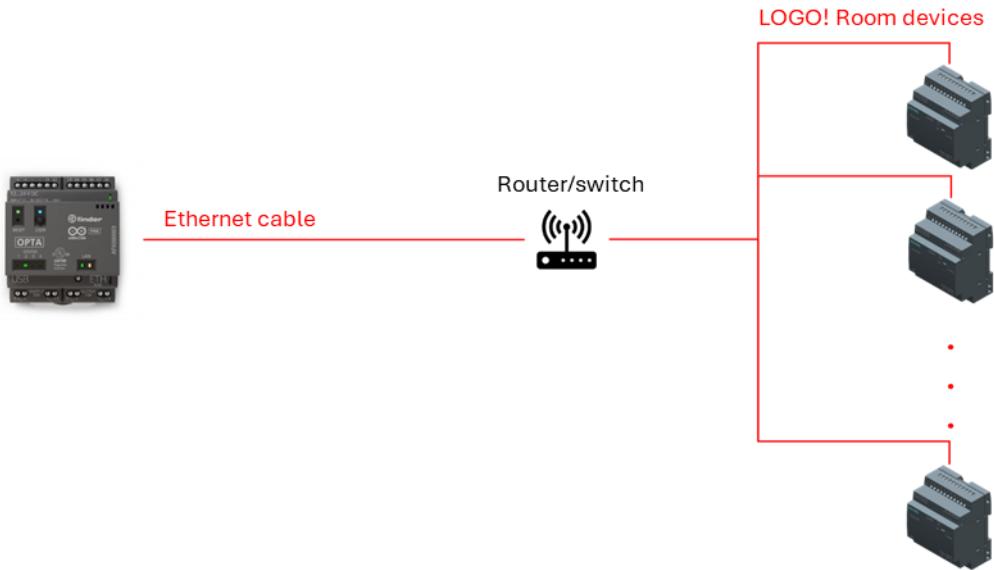


The license file “**main.ino.bin**” is unique for the OPTA device of our project and cannot be used on any other OPTA
In case of a fault/replacement of OPTA device, you will have to repeat the procedure and get a new license file

In the next section, we will examine the operating instructions of OPTA, e.g. how to change IP address, as well as diagnostic information through the LEDs on the front of the device.

6. OPERATING INSTRUCTIONS

OPTA scans the IP network range it belongs to for any LOGO! device and validates their license. We must confirm that OPTA is connected to the same IP network as LOGO! devices of the guest rooms and OPTA has an address is in the same range (e.g. 192.168.0.1 to 192.168.0.255).



We can use the USER button on the front side of the device to rescan LOGO! devices or change the IP address of OPTA. Additionally, by pressing the RESET button, we can restart the device in case of an error.

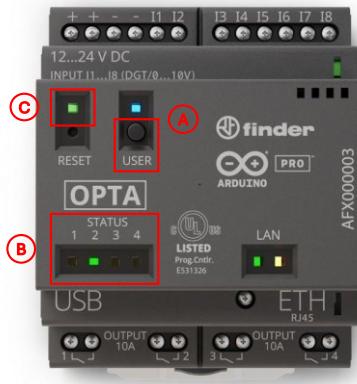
4.1. USER BUTTON

The User button allows us to set the OPTA to a state where we can perform certain functions or procedures. The available functions of the USER button are:

- (1) Rescan device network, (2) Change IP address, (3) Restore default IP address and (4) Set IP address dynamically (DHCP)**

4.1.1. Rescan device network

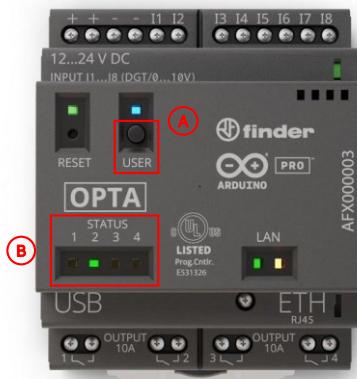
One press of the USER button initiates a scan of the IP network for connected LOGO! devices. This function can be useful when we need to replace a faulty LOGO! device or if we change the IP addresses of LOGO! devices.



- **A – Press USER button once:** Start of device network scan
- **B – STATUS LED 3 and 4 turn off:** If either of these LEDs was on, it will turn off when the scan starts. As soon as the scan is completed, one of these LEDs will turn on with green color, depending on the number of devices that were discovered
- **C – LED RESET lights on constant green:** As long as the scan is running, Reset LED will remain turned on and green

4.1.2. Change IP address

Two consecutive presses of the USER button start the embedded web server of OPTA for 5 minutes, which allows us to change the IP address of the device.



- **A – Two consecutive presses of the USER button:** Start the embedded web server for 5 minutes
- **B – LED 1 to 4 light on constant green:** As long as the embedded web server is running, STATUS LEDs 1 to 4 will remain turned on and green



When the 4 STATUS LEDs are tuned on and green, we can be sure that we pressed the USER button correctly and the web server has started. We can now choose our favorite browser application (Firefox, Chrome, Edge) and enter the IP address of OPTA on the search field. Follow the simple instructions to set a new IP address for OPTA.



The default IP address of OPTA is **192.168.0.99**

In case you changed the default IP address and forgot it, you can restore it by following the steps in section **(3) Restore default IP address**

Set the IP Address of OPTA

Enter IP Address:

- Main page of OPTA web server

Set the IP Address of OPTA

Enter IP Address:
Sent IP address 192.168.10.99 to OPTA

IP address was successfully set

- Enter the IP address you want to set for OPTA in the text field, e.g. 192.168.10.99
- A message will appear to inform us that the IP changed successfully

Set the IP Address of OPTA

Enter IP Address:
Invalid IP address format

- In case the IP address we entered does not have a valid format, an error message will appear

Set the IP Address of OPTA

Enter IP Address:
Sent IP address 192.168.0.5 to OPTA

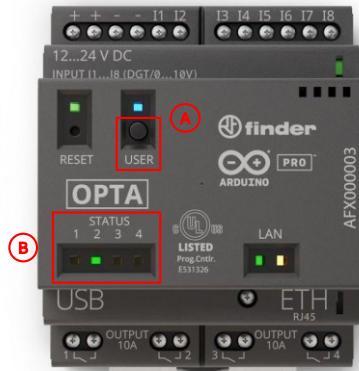
Network error occurred

- In case there is a communication error between our computer and OPTA, an error message will appear

A change in the IP address of OPTA device will initiate a device network scan, since the IP address range has changed and we have to find LOGO! devices in the new range.

4.1.3. Restore default IP address

Three or more consecutive presses of the USER button will restore the default IP address of OPTA, which is 192.168.0.99. OPTA will start a device network scan after restoring its default IP address, to locate LOGO! devices in the new address range.



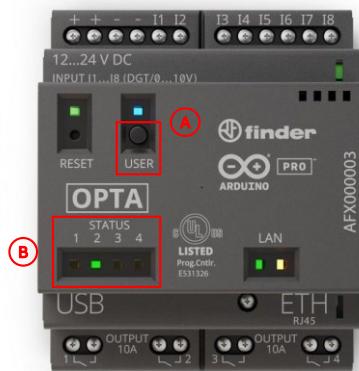
- **A – Three or more consecutive presses of the USER button:** Restore default IP address – 192.168.0.99
- **B – STATUS LED 1 and 2 light on constant green:** As long as the change of IP address is running, STATUS LED 1 and 2 remain constant on and green. After the procedure finishes, **STATUS LED 1 will be turned on and green**

4.1.4. Set IP address automatically (with DHCP)

The initial state of OPTA assumes a static IP address, which defaults to 192.168.0.99. Even when setting a new IP address through the web server, OPTA keeps the new address in memory as static and does not change it. OPTA communicates constantly with the visualization server and the LOGO! devices of the rooms, so it is absolutely necessary that we know the IP address we have set to OPTA and that this address does not change (e.g. when a router restarts).

There are some cases where we would like to perform some functional tests or during project commissioning and we require the IP address of OPTA to be set dynamically.

In those cases, during the boot process of OPTA (or after a RESET) we can press the USER button once, **when the 4 STATUS LEDs blink**, to set its IP dynamically (DHCP). OPTA waits for a press of the USER button, for 15 seconds. If no press is detected, the IP is set statically.



- **A – Press the USER button once:** OPTA will set its IP dynamically (DHCP)
- **B – STATUS LED 1 to 4 blink:** OPTA waits for a press of the USER button, for 15 seconds. If no press is detected, the IP is set statically

4.2. RESET BUTTON

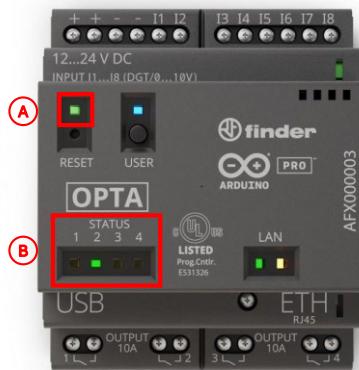
The RESET button can be pressed to restart OPTA, in case of a fault or malfunction. The RESET button is located inside the recess and we must use an object like e.g. a ball pen, to press it.



Restarting OPTA does not erase the static IP address we have set or the license program loaded in its memory.
Discovered LOGO! devices from network scan are also retained.

7. DIAGNOSTICS – TROUBLESHOOTING

OPTA has 4 STATUS LEDs and 1 RESET LED on the front side, allowing us to quickly diagnose the state of the device with a simple visual check.



- **A – Reset LED:** It can be turned off, turned on and green or red
- **B – STATUS LED 1 to 4:** Each of them can be either turned off or on and green

The following table show every possible LED state and the diagnostic information it represents:

LED	Κατάσταση	Πληροφορία
Reset LED	 Red color – blinking	OPTA has encountered an error during boot, program loading and/or operation. Solution: Press the RESET button to restart the device. If the problem persists, it is possible you might need to replace the device and the license.
	 Green color – blinking	OPTA is in programming mode. Occurs only during license request and install license. With a press of the reset button, OPTA exits programming mode.

Reset LED		Red color – constant on	The loaded license program is not valid. Device function has halted. Solution: Contact OWL Automata to purchase a valid license file.
		Green color – constant on	OPTA is scanning the IP network for LOGO! devices. When the operation finishes, the LED will turn off.
STATUS LED		LED 1 to 4 – blinking	During the boot process, OPTA waits 15 seconds for a USER button press. If we press the USER button within this time window, OPTA will set its IP address dynamically (DHCP). Otherwise, as soon as 15 seconds pass, it will continue its normal operation.
		LED 1 and 2 – constant on <i>State of LED 3 and 4 – irrelevant</i>	OPTA is setting its IP address, either static or with DHCP. When the procedure finishes, the state of LED 1 and 2 will let us know the result.
		LED 1 – constant on <i>State of LED 3 and 4 – irrelevant</i>	OPTA set its IP statically. If neither of LED 1 and 2 lights on, OPTA did not set its IP address, which means there is an error in our network or ethernet cable.
		LED 2 – constant on <i>State of LED 3 and 4 – irrelevant</i>	OPTA set its IP dynamically (through DHCP, if available). If neither of LED 1 and 2 lights on, OPTA did not set its IP address, which means there is an error in our network or ethernet cable.
		LED 3 and 4 – constant on <i>State of LED 1 and 2 – irrelevant</i>	OPTA tries to connect to the internet to synchronize the internal clock. In case of success, STATUS LED 3 will remain constant on.
		LED 3 – constant on <i>State of LED 1 and 2 – irrelevant</i>	OPTA has successfully connected to internet. As long as it is connected, the LED remains on. If LED 3 is off, OPTA does not have internet connection and we have to check its IP address or our network's internet access.

STATUS LED		LED 4 – constant on <i>State of LED 1 and 2 – irrelevant</i>	OPTA has completed the network scan for LOGO! devices and the number of discovered devices was less than the number of rooms of the hotel project. Solution: You can repeat the network scan process by pressing the USER button once. If the installed devices are indeed fewer than the total number of hotel rooms (e.g. some rooms have not yet be delivered), then we can repeat the process as soon as we install and commission all LOGO! devices.
		LED 1 to 4 – constant on	The embedded web server of OPTA is up and running. The web server is running for 5 minutes or until it receives a new IP address through a browser. The STATUS LEDs will turn off when the server stops.



Chameleon

IP Address migration

1. System IP network devices

The following Chameleon HaaS system devices require an ethernet connection to the IP network:

- LOGO! devices (one base module in each guest room).
- KNX gateway devices (located in common areas' consumer unit), CMK2000 from Siemens.
- OPTA PLC from Finder
- One or more KNX/IP routers, N 146/03 from Siemens.

2. IP Pool

A full hotel configuration of 90 guest rooms, has a minimum of 110 devices (+14 optional KNX/IP routers) that connect to the IP network, occupying an IP pool which ranges from address 192.168.0.99 to 192.168.0.208.

In case the IT manager of the hotel unit requests to change the IP address range of our system, we must determine the new IP address range and update each device configuration as well as Comfort Click visualization.

3. IP Migration Tool

IP migration tool is a software tool that assists us in determining the new IP addresses for each device and provides instructions on how to update them.

Open the software tool and press on **Change IP**.



A pop-up window opens, prompting us to enter details about our project like number of guest rooms, number of KNX/IP routers (KNX lines) and the first IP address of our new address range (the 4th byte/field of the IP address must be between 2 and 132).

Change first IP address ×

Number of Rooms	<input type="text" value="11"/>	KNX lines:	<input type="text" value="2"/>	
New first IP:	<input type="text" value="192"/>	<input type="text" value="168"/>	<input type="text" value="10"/>	<input type="text" value="99"/>
<input type="button" value="Ok"/> <input type="button" value="Reset"/>				

After we fill all the fields of the window, we press OK.



IP migration tool will show the new IP address for each device as well as instructions on how to change the default IP addresses to the new ones:

Device	IP Address	New IP Address	Open Web Server	Comfort Click	FTS 1	FTS 2	Comfort Click	Default IP
CONFCLICK	192.168.0.39	192.168.10.99						
LOGO!	192.168.0.100	192.168.10.100	Write the IP Address-->192.168.10.100					
LOGO!	192.168.0.101	192.168.10.101		Room 101->192.168.10.101			Building/Devices/Network/Node IP Address-->192.168.10.99	
LOGO!	192.168.0.102	192.168.10.102		Room 102->192.168.10.102			Building/Devices/Network/Node IP Address-->192.168.10.101	
LOGO!	192.168.0.103	192.168.10.103		Room 103->192.168.10.103			Building/Devices/Network/Node IP Address-->192.168.10.101	
LOGO!	192.168.0.104	192.168.10.104		Room 104->192.168.10.104			Building/Devices/Network/Node IP Address-->192.168.10.101	
LOGO!	192.168.0.105	192.168.10.105		Room 105->192.168.10.105			Building/Devices/Network/Node IP Address-->192.168.10.101	
LOGO!	192.168.0.106	192.168.10.106		Room 106->192.168.10.106			Building/Devices/Network/Node IP Address-->192.168.10.101	
LOGO!	192.168.0.107	192.168.10.107		Room 107->192.168.10.107			Building/Devices/Network/Node IP Address-->192.168.10.101	
LOGO!	192.168.0.108	192.168.10.108		Room 108->192.168.10.108			Building/Devices/Network/Node IP Address-->192.168.10.101	
LOGO!	192.168.0.109	192.168.10.109		Room 109->192.168.10.109			Building/Devices/Network/Node IP Address-->192.168.10.101	
LOGO!	192.168.0.110	192.168.10.110		Room 111->192.168.10.110			Building/Devices/Network/Node IP Address-->192.168.10.101	
CMK2000	192.168.0.190	192.168.10.190		Own IP address-->192.168.10.190	IP address of LOGO! base module-->192.168.10.100		Building/Devices/LICENSE/OPTA/Settings/Address-->192.168.10.99	
CMK2000	192.168.0.191	192.168.10.191			Own IP address-->192.168.10.191		Building/Devices/Network/Node IP Address-->192.168.10.105	
CMK2000	192.168.0.192	192.168.10.192			Own IP address-->192.168.10.192		IP address of LOGO! base module-->192.168.10.110	
IP Router Secure N146/03	192.168.0.208	192.168.10.208			Properties/IP Address-->192.168.10.208			Building/Devices/KNX-->192.168.10.208
IP Router Secure N146/03	192.168.0.209	192.168.10.209			Properties/IP Address-->192.168.10.209			

4. Change IP address of OPTA

In order to change the IP address of OPTA, IP migration tool instructs us to use the Web Server of OPTA for updating the IP address (Write the IP Address-->192.168.10.99) and change the corresponding field in ComfortClick configurator (Building/Devices/LICENSE/OPTA/Settings/Address -->192.168.10.99)

Device	IP Address	New IP Address	Data Web Server	LOGO!Soft Comfort	FTS 1	FTS 2	Comfort Click	Default IP
Opta	192.168.0.99	192.168.10.99	Write the IP Address-->192.168.10.99					
LOGO!	192.168.0.100	192.168.10.100		Room 101->192.168.10.100			Building/Devices/LICENSE/OPTA/Settings/Address-->192.168.10.99	
LOGO!	192.168.0.101	192.168.10.101		Room 102->192.168.10.101			Building/Areas/Hotel/Floor 1/Room 102/Devices/Modbus/Settings/(<-->192.168.10.100)	
LOGO!	192.168.0.102	192.168.10.102		Room 103->192.168.10.102			Building/Areas/Hotel/Floor 1/Room 103/Devices/Modbus/Settings/(<-->192.168.10.102)	
LOGO!	192.168.0.103	192.168.10.103		Room 104->192.168.10.103			Building/Areas/Hotel/Floor 1/Room 104/Devices/Modbus/Settings/(<-->192.168.10.103)	
LOGO!	192.168.0.104	192.168.10.104		Room 105->192.168.10.104			Building/Areas/Hotel/Floor 1/Room 105/Devices/Modbus/Settings/(<-->192.168.10.104)	
LOGO!	192.168.0.105	192.168.10.105		Room 106->192.168.10.105			Building/Areas/Hotel/Floor 1/Room 106/Devices/Modbus/Settings/(<-->192.168.10.105)	
LOGO!	192.168.0.106	192.168.10.106		Room 107->192.168.10.106			Building/Areas/Hotel/Floor 1/Room 107/Devices/Modbus/Settings/(<-->192.168.10.106)	
LOGO!	192.168.0.107	192.168.10.107		Room 108->192.168.10.107			Building/Areas/Hotel/Floor 1/Room 108/Devices/Modbus/Settings/(<-->192.168.10.107)	
LOGO!	192.168.0.108	192.168.10.108		Room 109->192.168.10.108			Building/Areas/Hotel/Floor 1/Room 109/Devices/Modbus/Settings/(<-->192.168.10.108)	
LOGO!	192.168.0.109	192.168.10.109		Room 110->192.168.10.109			Building/Areas/Hotel/Floor 1/Room 110/Devices/Modbus/Settings/(<-->192.168.10.109)	
LOGO!	192.168.0.110	192.168.10.110		Room 111->192.168.10.110			Building/Areas/Hotel/Floor 1/Room 111/Devices/Modbus/Settings/(<-->192.168.10.110)	
CMK2000	192.168.0.190	192.168.10.190		Own IP address-->192.168.10.190	IP address of LOGO! base module-->192.168.10.100			
CMK2000	192.168.0.191	192.168.10.191			Own IP address-->192.168.10.191			
CMK2000	192.168.0.192	192.168.10.192			Own IP address-->192.168.10.192			
IP Router Secure N146/03	192.168.0.208	192.168.10.208			Properties/IP Address-->192.168.10.208			
IP Router Secure N146/03	192.168.0.209	192.168.10.209			Properties/IP Address-->192.168.10.209			

To access OPTA's embedded web server, we must press 2 consequent times the "USER button" on the front side of the device and wait until all 4 STATUS LEDs turn on. If the LEDs turn on, then we pressed the button correctly and the web server is running. We can use our preferred browser (Firefox, Chrome, Edge) and write the default IP address of OPTA (192.168.0.99) in the search field. By following the instructions of IP migration tool, we must enter the new IP address (in our example 192.168.10.99) in the text field.

Set the IP Address of OPTA

Enter IP Address:

Write the IP address

If the procedure completes successfully, a confirmation message will appear:

Set the IP Address of OPTA

Enter IP Address: 192.168.10.99

Sent IP address 192.168.10.99 to OPTA

Write the IP address

IP address was successfully set

In case we enter an invalid IP address format, an error message will appear:

Set the IP Address of OPTA

Enter IP Address:

Invalid IP address format

In case the IP address was not updated correctly, due to network issues, a message will appear, informing us of the error:

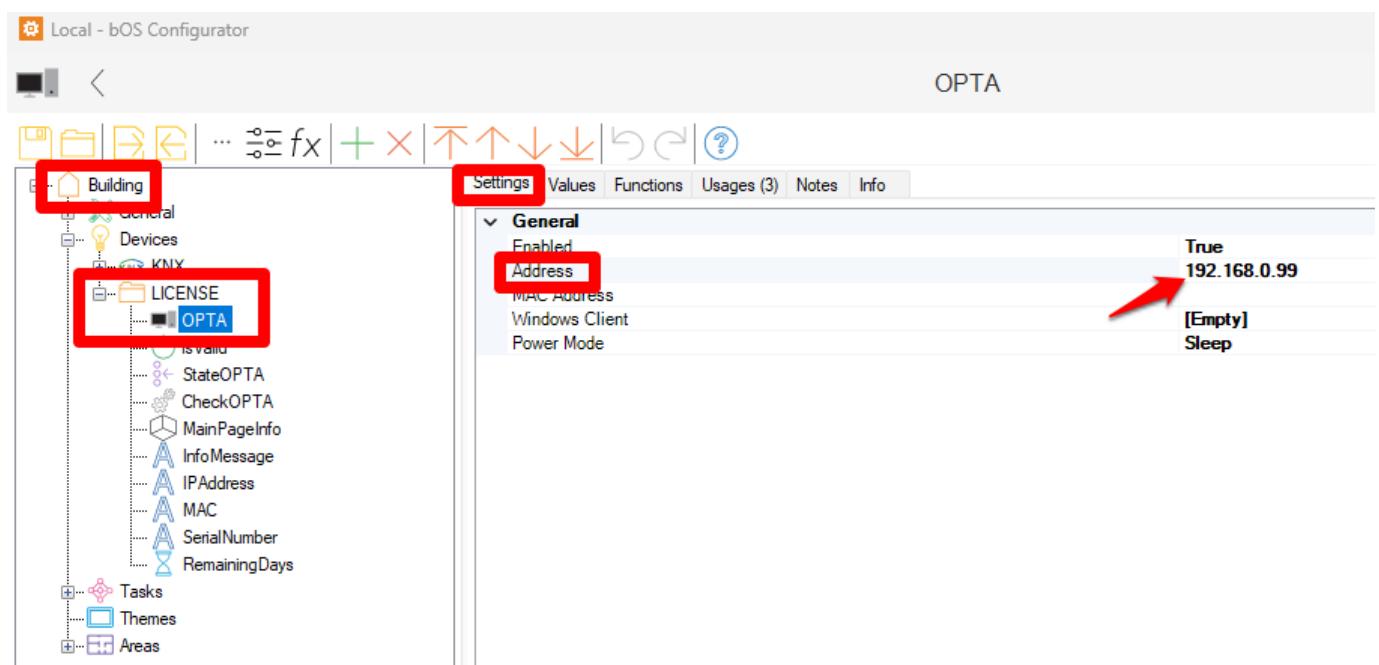
Set the IP Address of OPTA

Enter IP Address:

Sent IP address 192.168.0.5 to OPTA

Network error occurred

After updating the IP address of OPTA, we must open Comfort Click configurator application and update the corresponding field (Building/Devices/LICENSE/OPTA/Settings/Address) with the new IP address:



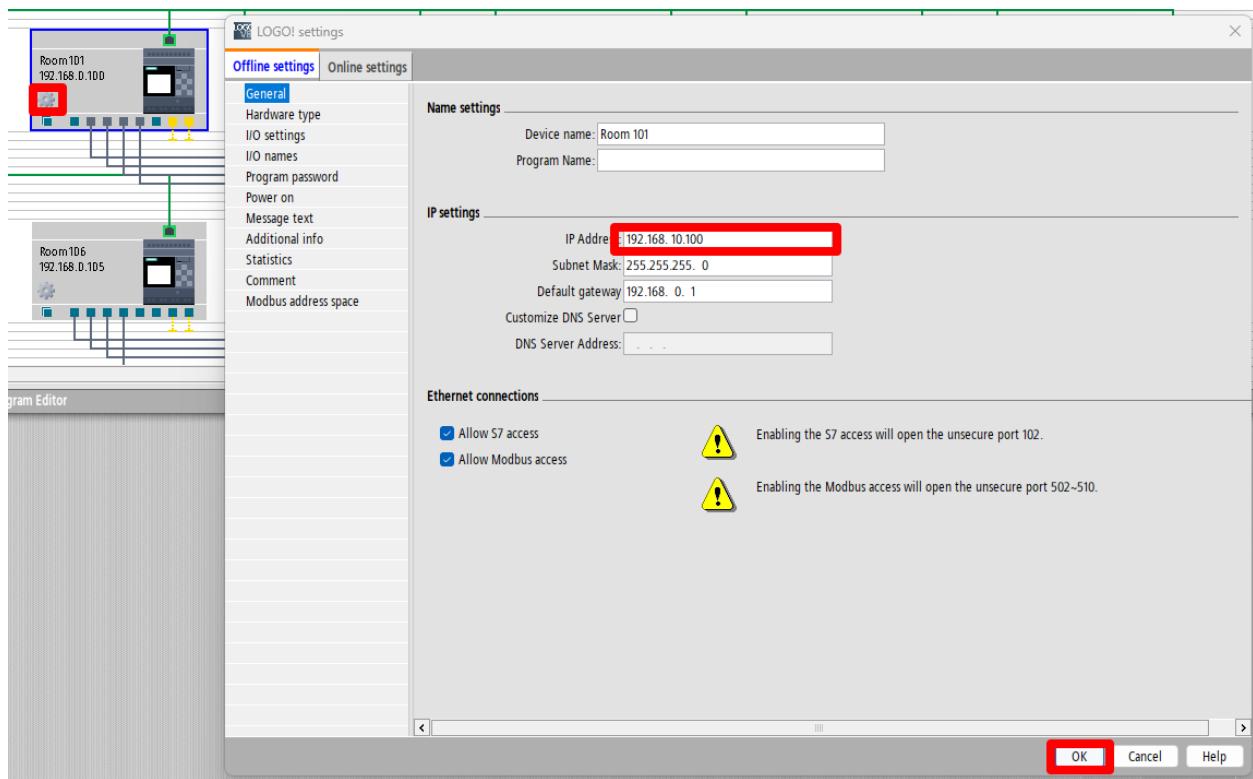
5. Change IP address of LOGO!

IP migration tool informs us to change the IP address in LOGO! Soft Comfort base on the instruction:

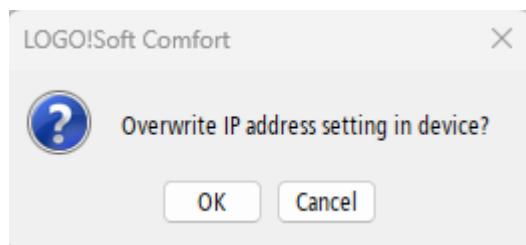
Room 101-->192.168.10.100

Device	IP Address	NEW IP Address	Opta Web Server	LOGO!Soft Comfort	ETS 1	ETS 2	Comfort Click
Logo!	192.168.0.100	192.168.10.100	Write the IP Address: 192.168.10.99				
Logo!	192.168.0.101	192.168.10.101		Room 101-->192.168.10.100			Building/Areas/Hotel/Floor 1/Room 101/Devices/Modbus/Settings/IP->192.168.10.100
Logo!	192.168.0.102	192.168.10.102		Room 102-->192.168.10.100			Building/Areas/Hotel/Floor 1/Room 102/Devices/Modbus/Settings/IP->192.168.10.101
Logo!	192.168.0.103	192.168.10.103		Room 103-->192.168.10.103			Building/Areas/Hotel/Floor 1/Room 103/Devices/Modbus/Settings/IP->192.168.10.103
Logo!	192.168.0.104	192.168.10.104		Room 104-->192.168.10.103			Building/Areas/Hotel/Floor 1/Room 104/Devices/Modbus/Settings/IP->192.168.10.103
Logo!	192.168.0.105	192.168.10.105		Room 105-->192.168.10.104			Building/Areas/Hotel/Floor 1/Room 105/Devices/Modbus/Settings/IP->192.168.10.104
Logo!	192.168.0.106	192.168.10.106		Room 106-->192.168.10.105			Building/Areas/Hotel/Floor 1/Room 106/Devices/Modbus/Settings/IP->192.168.10.105
Logo!	192.168.0.107	192.168.10.107		Room 107-->192.168.10.106			Building/Areas/Hotel/Floor 1/Room 107/Devices/Modbus/Settings/IP->192.168.10.106
Logo!	192.168.0.108	192.168.10.108		Room 108-->192.168.10.107			Building/Areas/Hotel/Floor 1/Room 108/Devices/Modbus/Settings/IP->192.168.10.107
Logo!	192.168.0.109	192.168.10.109		Room 109-->192.168.10.108			Building/Areas/Hotel/Floor 1/Room 109/Devices/Modbus/Settings/IP->192.168.10.108
Logo!	192.168.0.110	192.168.10.110		Room 110-->192.168.10.109			Building/Areas/Hotel/Floor 1/Room 110/Devices/Modbus/Settings/IP->192.168.10.109
Logo!	192.168.0.111	192.168.10.111		Room 111-->192.168.10.110			Building/Areas/Hotel/Floor 1/Room 111/Devices/Modbus/Settings/IP->192.168.10.110
OMK2000	192.168.0.191	192.168.10.191					Own IP address-->192.168.10.191 IP address of LOGO! base module-->192.168.10.105
OMK2000	192.168.0.192	192.168.10.192					Own IP address-->192.168.10.192 IP address of LOGO! base module-->192.168.10.110
IP Router Secure NI46/03	192.168.0.208	192.168.10.208			Properties/IP/IP Address-->192.168.10.208		Building/Devices/KNX-->192.168.10.208
IP Router Secure NI46/03	192.168.0.209	192.168.10.209			Properties/IP/IP Address-->192.168.10.209		Building/Devices/KNX-->192.168.10.209

To change the IP address, we have to open the final Network Project file (The one mentioned in LOGO! instructions from Configurator software) and select the device named Room 101 to update with the new IP setting. E.g. for the first LOGO! on the list we need to select Room 101, click on the gear symbol and enter the new IP address (in our example 192.168.10.100) in our Network Project and download the program.



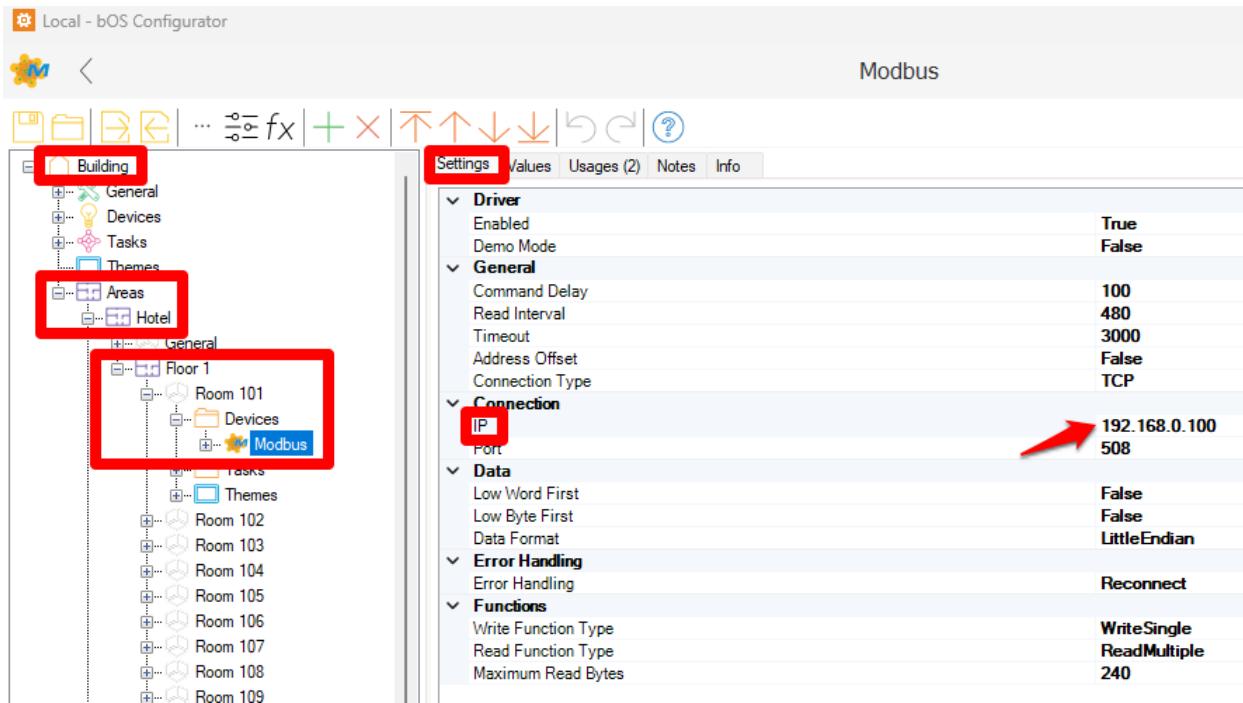
If the LOGO! device already had an IP address, a pop-up window will ask us if we want to overwrite the previous IP setting. Press OK to confirm:



The IP migration tool has also generated instructions on how to update the IP address setting of LOGO! devices in the Comfort Click visualization. We navigate the tree structure as mentioned in the instructions and update the IP:



(Building/Areas/Hotel/Floor 1/Room 101/Devices/Modbus/Settings/IP-->192.168.10.100)



6. Change IP address of CMK2000

IP migration tool informs us that we have to change the IP address setting of CMK2000 devices, in two fields, using the ETS software (version 5 or 6):

IP migration tool tool: Chameleon Huds		Data with Service		Unknown content		ETS 1		ETS 2		Content DB	
Dgta	192.168.0.99	192.168.0.99	Write the IP Address-->192.168.10.99			Room 101=>192.168.10.100		Building-Areas-Hotel-Floor 1-Room 101-Devices-Modbus-Settings		Building-Areas-Hotel-Floor 1-Room 101-Devices-Modbus-Settings	
LOGO!	192.168.0.100	192.168.0.100				Room 101=>192.168.10.100		Building-Areas-Hotel-Floor 1-Room 101-Devices-Modbus-Settings		Building-Areas-Hotel-Floor 1-Room 101-Devices-Modbus-Settings	
LOGO!	192.168.0.100	192.168.0.100				Room 101=>192.168.10.100		Building-Areas-Hotel-Floor 1-Room 101-Devices-Modbus-Settings		Building-Areas-Hotel-Floor 1-Room 101-Devices-Modbus-Settings	
LOGO!	192.168.0.100	192.168.0.100				Room 101=>192.168.10.100		Building-Areas-Hotel-Floor 1-Room 101-Devices-Modbus-Settings		Building-Areas-Hotel-Floor 1-Room 101-Devices-Modbus-Settings	
LOGO!	192.168.0.100	192.168.0.100				Room 101=>192.168.10.100		Building-Areas-Hotel-Floor 1-Room 101-Devices-Modbus-Settings		Building-Areas-Hotel-Floor 1-Room 101-Devices-Modbus-Settings	
LOGO!	192.168.0.100	192.168.0.100				Room 101=>192.168.10.100		Building-Areas-Hotel-Floor 1-Room 101-Devices-Modbus-Settings		Building-Areas-Hotel-Floor 1-Room 101-Devices-Modbus-Settings	
LOGO!	192.168.0.100	192.168.0.100				Room 101=>192.168.10.100		Building-Areas-Hotel-Floor 1-Room 101-Devices-Modbus-Settings		Building-Areas-Hotel-Floor 1-Room 101-Devices-Modbus-Settings	
LOGO!	192.168.0.100	192.168.0.100				Room 101=>192.168.10.100		Building-Areas-Hotel-Floor 1-Room 101-Devices-Modbus-Settings		Building-Areas-Hotel-Floor 1-Room 101-Devices-Modbus-Settings	
LOGO!	192.168.0.100	192.168.0.100				Room 101=>192.168.10.100		Building-Areas-Hotel-Floor 1-Room 101-Devices-Modbus-Settings		Building-Areas-Hotel-Floor 1-Room 101-Devices-Modbus-Settings	
CMK2000	192.168.0.190	192.168.0.190				1.1.1 Communication module for room 1-5 LOGO-KNX-Module - CMK2000 own IP address-->192.168.10.190		1.1.1 Communication module for room 1-5 LOGO-KNX-Module - CMK2000 own IP address-->192.168.10.190		1.1.1 Communication module for room 1-5 LOGO-KNX-Module - CMK2000 own IP address-->192.168.10.190	
CMK2000	192.168.0.191	192.168.0.191				1.1.1 Communication module for room 6-10 LOGO-KNX-Module - CMK2000 own IP address-->192.168.10.191		1.1.1 Communication module for room 6-10 LOGO-KNX-Module - CMK2000 own IP address-->192.168.10.191		1.1.1 Communication module for room 6-10 LOGO-KNX-Module - CMK2000 own IP address-->192.168.10.191	
CMK2000	192.168.0.192	192.168.0.192				1.1.1 Communication module for room 11-15 LOGO-KNX-Module - CMK2000 own IP address-->192.168.10.192		1.1.1 Communication module for room 11-15 LOGO-KNX-Module - CMK2000 own IP address-->192.168.10.192		1.1.1 Communication module for room 11-15 LOGO-KNX-Module - CMK2000 own IP address-->192.168.10.192	
IP Router Secure N24/10	192.168.0.209	192.168.0.209				1.2.0 Router Secure N24/10/Properties/IP Address-->192.168.10.209		1.2.0 Router Secure N24/10/Properties/IP Address-->192.168.10.209		1.2.0 Router Secure N24/10/Properties/IP Address-->192.168.10.209	

The tool provides to instructions:

1.1.1 Communication module for room 1-5 LOGO-KNX-Module - CMK2000/Own IP address-->192.168.10.190

1.1.1 Communication module for room 1-5 LOGO-KNX-Module - CMK2000/IP address of LOGO! base module-->192.168.10.100

Locate and select device “1.1.1 Communication module for room 1-5 LOGO-KNX-Module” in ETS project and enter the two different IP addresses (192.168.10.190, 192.168.10.100) in the corresponding field.



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The screenshot shows the 'Buildings' software interface. On the left, there's a tree view of building structures: 'Buildings' (selected), 'Dynamic Folders', 'Hotel', 'Common Areas', 'CMK Communication modules', 'Guest Rooms', and 'Trades'. Under 'CMK Communication modules', several items are listed, with the first one highlighted in blue and labeled 'A'. A red arrow points from the label 'A' to this item. To its right is a detailed configuration window for the selected module. The window has tabs for 'General' (selected) and 'Parameters'. The 'General' tab contains fields for 'IP address of LOGO! base module' (192.168.0.100), 'Update rate' (150 ms), 'Own IP address' (192.168.0.190), 'Subnet mask' (255.255.255.0), 'Password for web interface' (Admin), and 'Date and time synchronisation' (None). A red box highlights the 'General' tab, and another red box highlights the 'Own IP address' field. A red arrow labeled 'B' points to the 'Parameters' tab at the bottom right of the window.

7. Change IP address of KNX/IP router

Ip migration tool has generated instruction on how to change the IP address for the KNX/IP routers (one or more):

For each KNX/IP router, we must change the IP address using ETS software based on the following instruction:

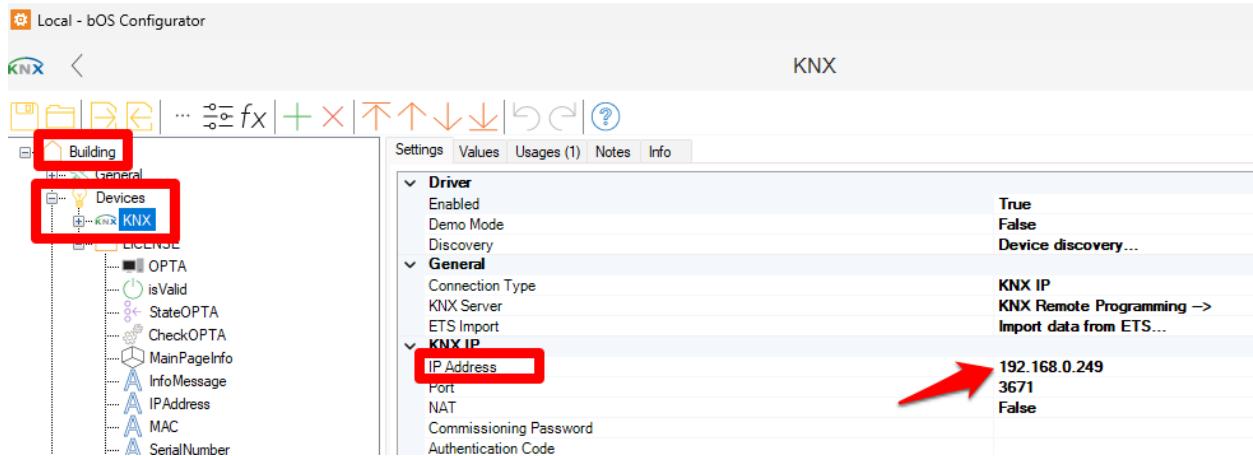
1.1.0 IP Router Secure N146/03Properties/IP/IP Address-->192.168.10.208

As an example, locate device “1.1.0 IP Router Secure N146/03” in your ETS project, open the side menu “Properties/IP/IP Address” and enter the new IP address IP 192.168.10.208:

The screenshot shows the ETS (Engineering Tool Suite) software interface. The top menu bar includes 'ETS', 'Edit', 'Workplace', 'Commissioning', 'Diagnostics', 'Apps', and 'Window'. Below the menu is a toolbar with icons for 'Close Project', 'Undo', 'Redo', 'Reports', 'Workplace', 'Catalogs', and 'Diagnostics'. A 'Buildings' dropdown menu is open, showing a tree structure with 'Buildings', 'Dynamic Folders', 'Hotel', 'Common Areas', and 'CMK Communication modules'. Under 'CMK Communication modules', the '1.1.0 IP Router Secure N 146/03' node is selected, highlighted with a red circle containing the number 1. To the right of the tree view is a 'Properties' panel with tabs for 'General', 'IP', 'Com...', and 'Infor...'. The 'General' tab is active, displaying settings like 'Support of unconfigured interfaces' (disabled), 'Monitor bus voltage failure' (disabled), and 'IP telegram manager' (disabled). The 'IP' tab is also visible. On the far right, a vertical sidebar lists network parameters: 'IP Address' (255.255.255.255), 'Subnet Mask' (255.255.255.255), 'Default Gateway' (255.255.255.255), 'MAC Address' (Unknown), and 'Multicast Address' (224.0.23.12). A red box highlights the 'Properties' panel, and another red box highlights the 'IP' tab in the properties panel. Red numbers 2, 3, and 4 are placed near the 'Properties' panel, the 'IP' tab, and the 'Subnet Mask' entry respectively.

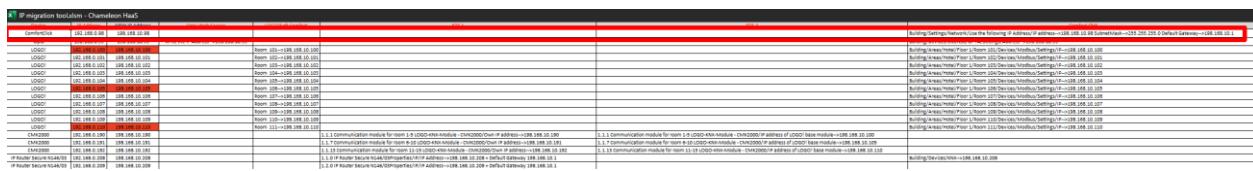


We must also update the IP address setting of **only** the first KNX/IP router (it is used for KNX-Visualization communication) in Comfort Click. Navigate the structure in Comfort Click configurator and update the IP: **Building/Devices/KNX-->192.168.10.208**



8. Change IP address of ComfortClick

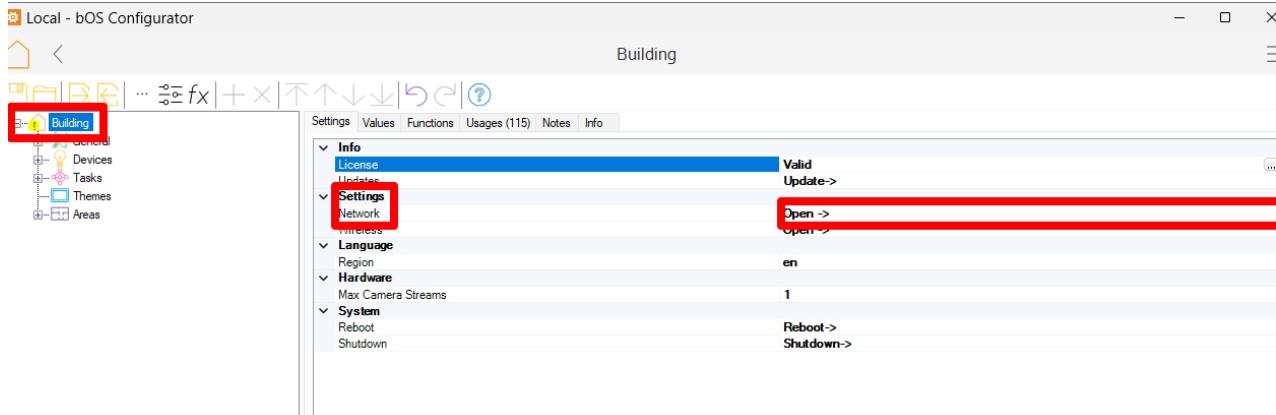
IP migration tool will generate instructions on how to change the IP address of Comfort Click visualization.



A change in the IP address of Comfort Click means that we actually change the IP address of the computer/server where the visualization is installed. The visualization software **should only be installed** in a computer/server of the hotel and if we need to change the IP address, we will follow the instruction that the IP migration tool generated:

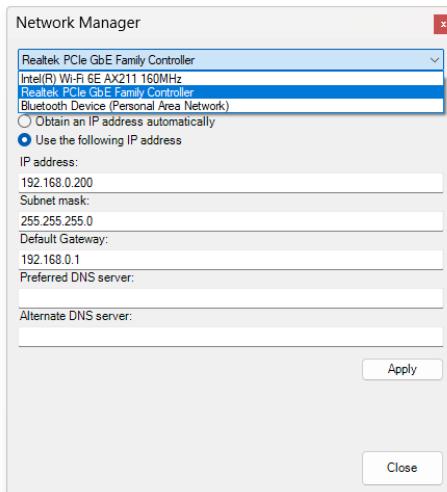
Building/Settings/Network/Use the following IP Address/IP address-->192.168.10.98 SubnetMask-->255.255.255.0 Default Gateway-->192.168.10.1

Navigate to Building/Settings/Network:





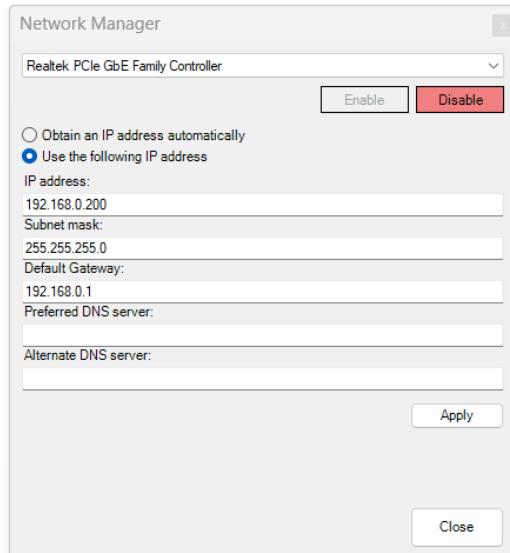
The pop-up window of network settings will appear. First, we choose whether the computer/server connects to the IP network with an ethernet port or Wi-Fi:



We recommend that an ethernet connection is used for the connection of the computer/server to the IP network.

After choosing connection method, select “Use the following IP Address” and fill the corresponding fields as mentioned in the instructions:

IP address-->192.168.10.98 SubnetMask-->255.255.255.0 Default Gateway-->192.168.10.1





APPENDIX



Appendix A – General parameters

APPENDIX A

System general parameters

Appendix A describes the general parameters of Chameleon HaaS system and their default values.

It can be used as a guide to better understand the functionality and behavior of the system, as it explains parameter functionality, the device it is implemented into and the desired resulting behavior of the system.

1. Occupancy timeout to apply A/C unit guest out actions

Software: ETS

Device: AC Gateway Room X (X = 101...190)

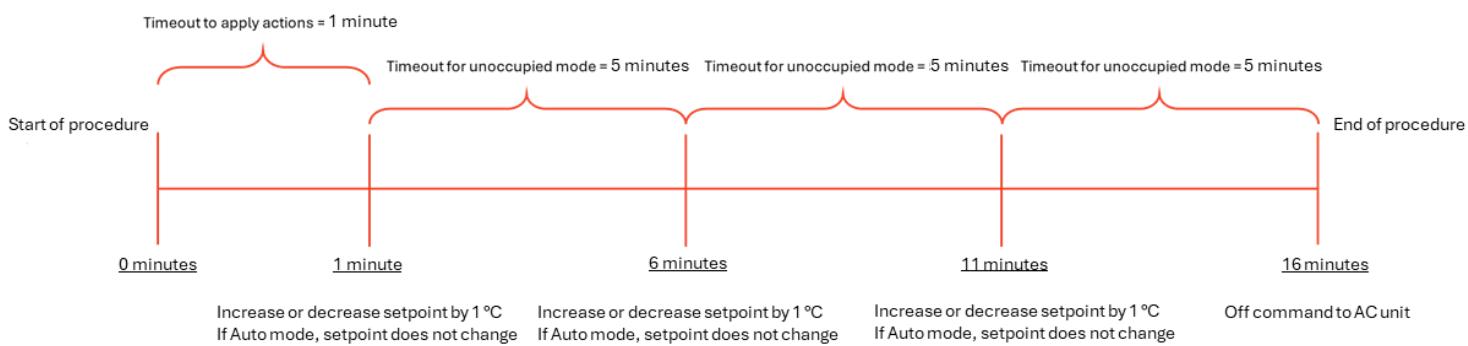
Parameter: Parameters -> Timeouts configuration -> Timeout to apply actions = **1 min.**

Parameters -> Timeouts configuration -> Timeout for unoccupied mode activation = **5 mins.**

Occupancy detection algorithm signals the A/C unit gateway device that the room is empty. The gateway device will initiate a power saving procedure, which gradually turns off the A/C unit, in the manner below:

When “**Timeout to apply actions**” (default 1 minute) expires, the setpoint temperature is decreased by 1 degree. Then, after “**Timeout for unoccupied mode activation**” (default 5 minutes) expires, the setpoint temperature is decreased by an additional 1 degree. This action is repeated 2 more times: When 5 minutes pass, temperature setpoint is decreased by 1 degree. As soon as another 5 minutes pass, the A/C unit is turned off.

The example above describes the functionality of the AC gateway device if the mode is set to **Cooling** when the procedure starts. If the AC mode was set to **Heating**, then instead of decreasing by 1 degree in each step, the temperature setpoint would increase by 1 degree during the procedure. If the mode was **Auto**, no increase or decrease in temperature setpoint takes place, the A/C unit simply turns off when the total time expires.



This procedure ensures that even if the system falsely detects an empty room, the A/C unit will not turn off immediately, avoiding guest discomfort. Furthermore, in the case of short guest absence, the room maintains a comfortable temperature condition and by not turning off and on the A/C unit frequently, we avoid energy waste.



2. Balcony door timeout for turning off the A/C unit

Software: ETS

Device: AC Gateway Room X (X = 101...190)

Parameter: Parameters -> Timeouts configuration -> AC Off timeout = **8 minutes**

The guest room automation system will turn the A/C unit off when the balcony door is opened for more than “AC Off timeout” minutes (default 8 minutes).

3. Allow on/off operation of the A/C unit when balcony door is open

Software: ETS

Device: AC Gateway Room X (X = 101...190)

Parameter: Parameters -> Timeouts configuration -> Allow On/Off operation when window contact is active = **No**

This parameter enables us to send KNX commands to the A/C unit through the gateway (e.g. from visualization server), when the balcony door is open. Reception can turn off an A/C unit that remains powered on due to system failure.

4. Guest welcome heating scene

Software: ETS

Device: AC Gateway Room X (X = 101...190)

Parameter: Parameters -> Scenes 1 -> Value for On-Off = **On**
-> Value for mode = **Heat**
-> Value for fan speed = **AUTO**
-> Value Vanes U-D = **Unchanged**
-> Value for setpoint = **26 °C**

The guest room automation system activates an HVAC scene when a guest enters the room. If the A/C unit was set to “Heating” mode, then scene 1 will be activated – “Welcome scene heating”, with the above default settings.



5. Guest welcome cooling scene

Software: ETS

Device: AC Gateway Room X (X = 101...190)

Parameter: Parameters -> Scenes 2 -> Value for On-Off = **On**
-> Value for mode = **Cool**
-> Value for fan speed = **AUTO**
-> Value Vanes U-D = **Unchanged**
-> Value for setpoint = **21 °C**

The guest room automation system activates an HVAC scene when a guest enters the room. If the A/C unit was set to “Cooling” mode, then scene 2 will be activated – “Welcome scene cooling”, with the above default settings.

6. Central pre-cooling/pre-heating scene during guest check-in

Software: ETS

Device: AC Gateway Room X (X = 101...190)

Parameter: Parameters -> Scenes 5 -> Value for On-Off = **On**
-> Value for mode = **Auto**
-> Value for fan speed = **Speed 2**
-> Value Vanes U-D = **Unchanged**
-> Value for setpoint = **Unchanged**

The central visualization of the system allows reception staff to check-in a guest in a room, automatically activating a pre-cooling/pre-heating scene for the specific room. This way, we ensure that the guest will enter a room with comfortable temperature conditions, avoiding discomfort due to heat or cold.

The central pre-cooling/pre-heating is scene number 5, with the above default settings.

7. Make up Room button hidden command

Software: LOGO!Soft Comfort

Device: LOGO! Base module 12/24 RCEo Room X (X = 101...190)

Files: Network_project_complete_Rooms01to10.snp έως και
Network_project_complete_Rooms81to90.snp

Default Alter Scenes.lsc

Default.lsc, DefaultMUR.lsc, DefaultMURDND.lsc, DefaultMUREC.lsc

TemplateMUR.lsc, TemplateMURDND.lsc, TemplateMURDNDEC.lsc, TemplateMUREC.lsc

UDF module: MrDn – U052

Initial value: 5 seconds

This parameter default value cannot be changed!

A hidden command is present in Make Up Room button of each guest room, if we chose the option to include “MUR” during room design. This command allows the hotel cleaning staff to inform the reception visualization that a room is clean and in “Ready” state, by pressing “Make Up Room” for **5 seconds**.

The light indication of the “Make Up Room” button will turn on and off subsequently, providing visual confirmation for the staff that the command was executed correctly.

8. Time to check for occupancy detection

Software: LOGO!Soft Comfort

Device: LOGO! Base module 12/24 RCEo Room X (X = 101...190)

Files: In all LOGO! diagram files

UDF module: Oc – U055

Initial value: Presence Detection time (minutes)

OcTm = 10 minutes

Presence Detection time (seconds)

TmRS = 598 seconds

Presence Detector deactivation time (seconds)

PDLa = 20 seconds

The guest room automation system implements occupancy detection algorithm with a combination of conventional presence detectors and entrance door magnetic contact, to ensure accurate detection of guest presence or absence and activate energy saving scenes.

Opening and closing the room entrance door activates occupancy detection algorithm. Only then is it necessary to evaluate guest presence or absence, avoiding this way false room states due to system components errors (e.g. guest is present and a presence detector did not detect movement).

As soon as the entrance door opens and closes, the system waits for “**PDLa**” time to pass, which is 20 seconds. This time ensures that we do not have a false detection signal by the presence detectors, since it is possible for a detector to detect a guest while opening the door to leave and activate their output. Therefore, we must wait for a short time, “**PDLa**”, to pass to ensure that a detection signal is accurate.



When “**PDLa**” time expires, occupancy detection algorithm starts monitoring for guest presence for “**OcTm**” time, which is 10 minutes. If presence is detected, then the room assumes “Occupied” state, otherwise it assumes “Vacant state”.

Time parameter “**TmRS**” is used internally by module Oc **and should be** as many seconds as time “**OcTm**” – **(minus) 2 seconds**. As an example, if “**OcTm**” = 15 minutes, meaning 900 seconds, then time “**TmRS**” = 898 seconds.

9. Brightness threshold for Bright/Dark scenes

Software: LOGO!Soft Comfort
Device: LOGO! Base module 12/24 RCEo Room X (X = 101...190)
Files: Any LOGO! programming file
LOGO! gate: B215
Initial value: Brightness in LUX **V1 = 300**

Guest room automation system allows for any button (either configured as scene or simple 1–1 control) to activate different actions based on brightness.

Each input module has a “Bright” and “Dark” output. If measured brightness is below threshold “**V1**”, with **300 lux** as default value, then the output “Dark” will be activated on button press. Otherwise, output “Bright” will be activated.

Please note that in order to activate this system functionality, you must program each LOGO! input module for brightness dependent scenes.

The threshold “**V1**” is compared to the actual measured brightness, which is sent through analog flag **AM64**. When connecting a brightness sensor to the system, either a KNX or Modbus device, the measurement value must be sent to **AM64**, so the system can compare threshold “**V1**” with the measured value and activate the right action.

Chameleon HaaS offers the option of a preconfigured solution based on the KNX brightness threshold from ABB, **TR/A 1.1**. If you opt for this implementation, no additional programming is required for brightness sensor connection, since the ETS project file already has all the necessary connections.

10. Username and password for visualization authorization

Software: bOS Config
Device: Comfort Click server
Initial value: User = **OWL**
 Password = **Chameleon2024**

Comfort click visualization software requires user credentials to connect to its user interface. The default credentials for the connection in the visualization of Chameleon HaaS are “**User = OWL**” and “**Password = Chameleon2024**”. Any user that attempts to use the visualization, must have the right credentials to be able to login.

The offered visualization license included in Chameleon HaaS, allows for 2 different users. The above credentials are valid for 1 of 2 total users. You are free to create a second user, with any credentials you want.

It is highly recommended that you change these credentials after system installation and commissioning, in consultation with your client, to avoid security risks.

11. Room device fault checking frequency

Software: bOS Config
Device: Comfort Click server
Initial value: Building -> Tasks -> AC Gateway timer -> Minutes = **30**

Visualization server checks for LOGO! and AC gateway device faults, every “**Building -> Tasks -> AC Gateway timer -> Minutes**” minutes, set at 30 minutes as default.

In the main page of the visualization, the reception staff has a quick overview of the number of device faults.

12. Pre-cooling/pre-heating scene timeout

Software: bOS Config
Device: Comfort Click server
Initial value: Building -> Areas -> Hotel -> General -> Tasks -> Preheat/Precool timeout set -> Precool/Preheat timeout(mins) = **10 minutes**

The pre-cooling/pre-heating scene will be automatically activated when the staff at the reception checks-in a guest, turning on the A/C unit of the specific room for “**Preheat timeout(mins)**” minutes, set at 10 minutes as default.

This timeout allows the system to create comfortable temperature conditions in the room before the guest arrives; while avoiding energy waste by leaving the A/C unit turned on indefinitely in case the guest does not visit the room straight away (e.g. The guest might go for a drink in the hotel bar before visiting his room).

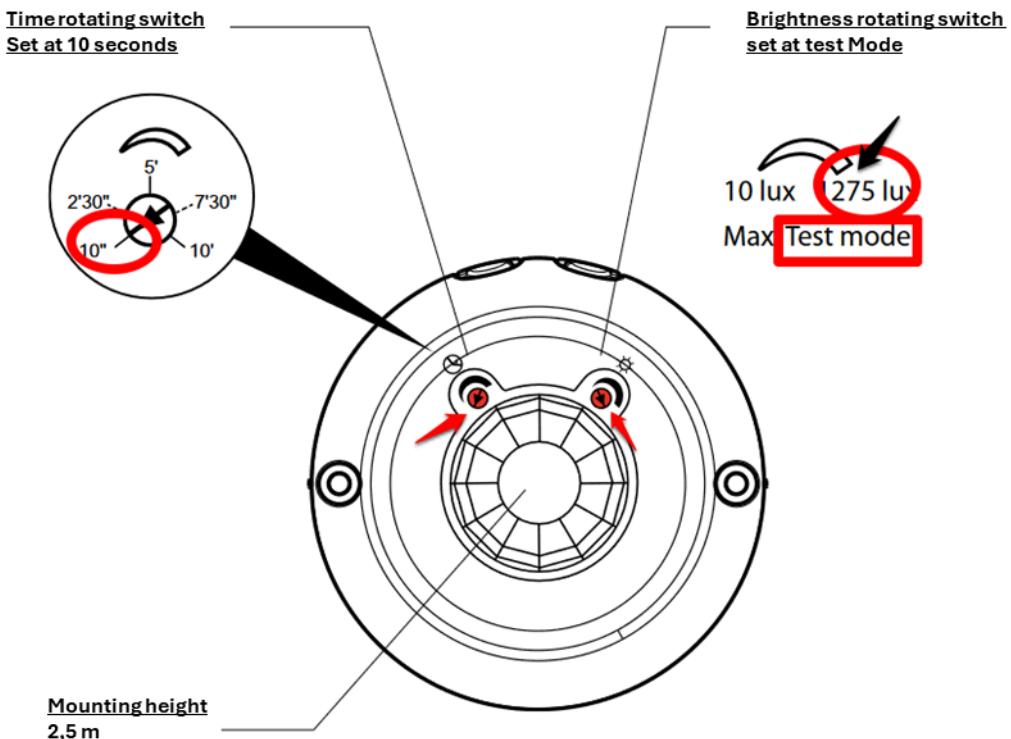
13. Conventional presence detector setup

The presence detector has 2 rotating switches for the adjustment of activation time and brightness sensitivity.

The time rotary position must be set to the minimum value of 10 seconds. If the time value is not set at 10 seconds, occupancy detection algorithm might not set the room in “Unoccupied” state when the guest leaves the room (Guest out scene), since the algorithm starts 20 seconds after the entrance door closes and the detector might still be falsely activated due to prior movement detection.

The brightness rotary position must be set to its maximum value named “test”, ensuring this way that the detector activates its output, on movement or presence detection, regardless of the measured room brightness. It should be noted that the activation of Bright and Dark scenes **is not related or affected by the brightness setting of the presence detector**.

In the image below, you can see the positions of the two rotary switches of the detector.



The presence detector covers a circular area of 8-meter diameter, if mounted at 2,5 meters above the ground. All room spaces must be covered by presence detectors, so a device is also required in the bathroom. In the main space of the room, the detector must be positioned in a place where it will provide maximum coverage of the area, **while also ensuring it monitors the entrance door of the room**. Occupancy detection algorithm expects a detection signal after opening the door, which means that no "Welcome Guest" scene will be activated if a presence detector does not detect guest movement.

If a room structural layout does not allow for a presence detector to simultaneously cover both the entrance door and the main space, more than one presence detector must be installed in this room.



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Appendix B – Software tools



APPENDIX B

Software tools

Chameleon HaaS provides a set of software tools to facilitate the design and engineering of your project as well as change default parameters or values of the system.

The available software tools are:

1. LOGO Hotel Configurator

File name: LOGO Hotel Configurator 64(or 32) bit Installer.exe

File path: Chameleon HaaS /Hotel Configurator/LOGO Hotel Configurator 64(or 32) bit
Installer.exe

The core of a hotel project is the guest room and our initial design of room functionalities and requirements is of crucial importance for the quality of the delivered end system.

LOGO Hotel Configurator allows for a simple and intuitive design of the functions for a typical guest room, as well as inputs and outputs.loads calculation. We can create a room configuration according to our project needs by filling the corresponding input and output cells.

When the design procedure is completed, the software will automatically generate programming instructions for LOGO! diagram files, simplifying the programming of the system.

Finally, the software will create a simple connection diagram, based on your configuration, that can be placed in each room and be used as a quick reference by the hotel maintenance staff.

2. License Loader

File name: Chameleon License Loader setup x64(\n 32).exe

File path: Chameleon HaaS / License Loader/ Chameleon License Loader setup x64.exe

Chameleon HaaS requires a license to use. The licensing of the system comprises of a PLC device, FINDER OPTA, and a software file that you will receive from OWL Automata and must be loaded to OPTA.

The software “**Chameleon License Loader**” will guide you through simple steps, to request and install a license file for OPTA. No prior knowledge of PLC programming is required, simply power on and connect the OPTA device to your PC. You can install the software by running “**Chameleon License Loader setup x64.exe**”.

3. IP Migration tool

File name: IP Migration Tool installer.exe

File path: Chameleon HaaS / Software tools/ IP Migration Tool installer.exe

The following Chameleon HaaS devices require an ethernet connection to the IP network:

- LOGO! devices (one base module in each room).
- CMK2000 KNX gateway (one device per 5 rooms, usually installed in common areas)
- OPTA PLC by Finder.
- One or more KNX Router, type N 146/03 Siemens.



In a full system configuration, meaning a 90-room hotel unit, a minimum of 110 devices (+14 optional routers) are connected to the IP network, occupying the IP address range of 192.168.0.99 to 192.168.0.208.

In case the IT department of the hotel requests that we use a different IP address range for the system, we must calculate the new IP addresses and update all connected devices as well as the Comfort Click server.

We can easily calculate the new IP addresses for each device in our system, by running “IP Migration Tool installer.exe ” and then launching IP Migration tool. The tool also provides instructions on how to change the IP setting of each device. It is also highly recommended to read chapter “**Change IP addresses**” of this document, which provides detailed instructions on how to change the IP setting of each device.

4. Room number list

File name: Room number list.xlsx

File path: Chameleon HaaS / Software tools/ Room number list.xlsx

Chameleon HaaS uses a predefined numbering structure for hotel guest rooms, which ranges from 101 to 190 (since the maximum allowed number of rooms is 90).

In most hotel projects, the number of a room corresponds to the location of the room, meaning the numbering is different than the predefined structure 101 to 190. For example, room 205 is the 5th room on the second floor of a building.

The file “**Room number list.xlsx**” is a simple excel sheet, where we can change the predefined room numbering structure of Chameleon HaaS, into the numbering structure that our hotel project requires. Simply fill the 3rd Column with the room numbers that must be used in your project and send the file to OWL Automata. You will then receive a new visualization file with your preferred room numbering.

The file has 90 room rows, the maximum number of rooms for a hotel project using the Chameleon HaaS system. **It is not necessary to fill each room row**, we can change only the room numbers we will use.



Appendix C – Default IP addresses table

APPENDIX C

Default IP addresses table

Chameleon HaS uses a default IP address space for LOGO! base modules, CMK2000 gateways, KNX/IP routers, Comfort Click server and OPTA. In the tables below, you can find the default IP addresses.

1. LOGO! base module of each room

Index	Room number	IP address of LOGO! BM
1	101	192.168.0.100
2	102	192.168.0.101
3	103	192.168.0.102
4	104	192.168.0.103
5	105	192.168.0.104
6	106	192.168.0.105
7	107	192.168.0.106
8	108	192.168.0.107
9	109	192.168.0.108
10	110	192.168.0.109
11	111	192.168.0.110
12	112	192.168.0.111
13	113	192.168.0.112
14	114	192.168.0.113
15	115	192.168.0.114
16	116	192.168.0.115
17	117	192.168.0.116
18	118	192.168.0.117
19	119	192.168.0.118
20	120	192.168.0.119
21	121	192.168.0.120
22	122	192.168.0.121
23	123	192.168.0.122
24	124	192.168.0.123
25	125	192.168.0.124
26	126	192.168.0.125
27	127	192.168.0.126
28	128	192.168.0.127
29	129	192.168.0.128
30	130	192.168.0.129
31	131	192.168.0.130
32	132	192.168.0.131
33	133	192.168.0.132
34	134	192.168.0.133
35	135	192.168.0.134
36	136	192.168.0.135
37	137	192.168.0.136
38	138	192.168.0.137

39	139	192.168.0.138
40	140	192.168.0.139
41	141	192.168.0.140
42	142	192.168.0.141
43	143	192.168.0.142
44	144	192.168.0.143
45	145	192.168.0.144
46	146	192.168.0.145
47	147	192.168.0.146
48	148	192.168.0.147
49	149	192.168.0.148
50	150	192.168.0.149
51	151	192.168.0.150
52	152	192.168.0.151
53	153	192.168.0.152
54	154	192.168.0.153
55	155	192.168.0.154
56	156	192.168.0.155
57	157	192.168.0.156
58	158	192.168.0.157
59	159	192.168.0.158
60	160	192.168.0.159
61	161	192.168.0.160
62	162	192.168.0.161
63	163	192.168.0.162
64	164	192.168.0.163
65	165	192.168.0.164
66	166	192.168.0.165
67	167	192.168.0.166
68	168	192.168.0.167
69	169	192.168.0.168
70	170	192.168.0.169
71	171	192.168.0.170
72	172	192.168.0.171
73	173	192.168.0.172
74	174	192.168.0.173
75	175	192.168.0.174
76	176	192.168.0.175
77	177	192.168.0.176
78	178	192.168.0.177
79	179	192.168.0.178
80	180	192.168.0.179
81	181	192.168.0.180
82	182	192.168.0.181
83	183	192.168.0.182
84	184	192.168.0.183
85	185	192.168.0.184
86	186	192.168.0.185
87	187	192.168.0.186
88	188	192.168.0.187

89	189	192.168.0.188
90	190	192.168.0.189

2. CMK2000 gateways

Index	IP address of CMK2000	IP address of LOGO! that communicates with CMK2000
1	192.168.0.190	192.168.0.100
2	192.168.0.191	192.168.0.105
3	192.168.0.192	192.168.0.110
4	192.168.0.193	192.168.0.115
5	192.168.0.194	192.168.0.120
6	192.168.0.195	192.168.0.125
7	192.168.0.196	192.168.0.130
8	192.168.0.197	192.168.0.135
9	192.168.0.198	192.168.0.140
10	192.168.0.199	192.168.0.145
11	192.168.0.200	192.168.0.150
12	192.168.0.201	192.168.0.155
13	192.168.0.202	192.168.0.160
14	192.168.0.203	192.168.0.165
15	192.168.0.204	192.168.0.170
16	192.168.0.205	192.168.0.175
17	192.168.0.206	192.168.0.180
18	192.168.0.207	192.168.0.185

3. KNX/IP Routers

Index	IP address of KNX/IP Router	KNX line where the router is installed
1	192.168.0.208	1.1
2	192.168.0.209	1.2
3	192.168.0.210	1.3
4	192.168.0.211	1.4
5	192.168.0.212	1.5
6	192.168.0.213	1.6
7	192.168.0.214	1.7
8	192.168.0.215	1.8
9	192.168.0.216	1.9
10	192.168.0.217	1.10
11	192.168.0.218	1.11
12	192.168.0.219	1.12
13	192.168.0.220	1.13
14	192.168.0.221	1.14
15	192.168.0.222	1.15



4. Server Comfort Click

Index	IP address of Comfort Click server
1	192.168.0.98

5. OPTA licensing device

Index	IP address of OPTA
1	192.168.0.99



Appendix D - OPTA Software and license

APPENDIX D

OPTA Software and license

1. Libraries and board package

Licensing of Chameleon HaaS system is done through FINDER OPTA. The license file is distributed as .bin file and the following libraries are used during the build process:

Library name	Author	Version	License	Webpage
ArduinoHttpClient	Arduino	0.6.0	Apache License, version 2.0	GitHub
ArduinoModbus	Arduino	1.0.9	LGPL-2.1	Arduino site
ArduinoRS485	Arduino	1.1.0	LGPL-2.1	Arduino site
ArduinoJson	Benoit Blanchon	7.0.4	MIT License	Library site
ArduinoECCX08	Arduino	1.3.8	LGPL-2.1	GitHub
Azure SDK for C	Microsoft	1.1.6	MIT License	GitHub
ArduinoBearSSL	Arduino	1.7.3	MIT License	GitHub
ArduinoMqttClient	Arduino	0.1.8	LGPL-2.1	GitHub
NTPClient_Generic	Fabrice Weinberg	3.7.5	MIT License	GitHub
Time	Michael Margolis	1.6.1	N/A	Arduino site

The board package used for the development of the software license file, is the following:

Board package	Author	Version	License	Arduino Mbed general
Arduino Mbed OS Opta Boards	Arduino	4.1.3	Compilation of libraries	GitHub

The board package includes necessary libraries for the programming and board peripheral components communication of OPTA devices.

The software of OPTA is licensed under the terms of GNU LESSER GENERAL PUBLIC LICENSE, version 2.1 February 1999, as described in the following pages.



2. GNU LESSER GENERAL PUBLIC LICENSE, version 2.1

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<signature of Ty Coon>, 1 April 1990
Ty Coon, President of Vice

That's all there is to it!



Appendix E – File structure

APPENDIX E

File structure

After buying a Chameleon HaaS system, a folder containing all the files required will be available for download. The file structure of this folder can be found below:

Name	Size	Allocated ▾
dist	191,1 MB	191,3 MB
LOGO Programming	110,4 MB	110,5 MB
Network project files	93,9 MB	93,9 MB
Network_projects_complete_diagram	89,0 MB	89,0 MB
Network_project_complete_Rooms31to40.snp	9,9 MB	9,9 MB
Network_project_complete_Rooms61to70.snp	9,9 MB	9,9 MB
Network_project_complete_Rooms01to10.snp	9,9 MB	9,9 MB
Network_project_complete_Rooms11to20.snp	9,9 MB	9,9 MB
Network_project_complete_Rooms41to50.snp	9,9 MB	9,9 MB
Network_project_complete_Rooms51to60.snp	9,9 MB	9,9 MB
Network_project_complete_Rooms81to90.snp	9,9 MB	9,9 MB
Network_project_complete_Rooms71to80.snp	9,9 MB	9,9 MB
Network_project_complete_Rooms21to30.snp	9,9 MB	9,9 MB
Chameleon HaaS TOS gr.docx	20,3 KB	24,0 KB
Chameleon HaaS TOS en.docx	17,8 KB	20,0 KB
Network_projects_without_diagrams	4,8 MB	4,8 MB
Network_project_final_Rooms01to10.snp	545,9 KB	548,0 KB
Network_project_final_Rooms11to20.snp	547,1 KB	548,0 KB
Network_project_final_Rooms21to30.snp	547,3 KB	548,0 KB
Network_project_final_Rooms31to40.snp	546,4 KB	548,0 KB
Network_project_final_Rooms41to50.snp	544,0 KB	548,0 KB
Network_project_final_Rooms81to90.snp	544,5 KB	548,0 KB
Network_project_final_Rooms51to60.snp	543,6 KB	544,0 KB
Network_project_final_Rooms61to70.snp	543,6 KB	544,0 KB
Network_project_final_Rooms71to80.snp	544,0 KB	544,0 KB
Chameleon HaaS TOS gr.docx	20,3 KB	24,0 KB
Chameleon HaaS TOS en.docx	17,8 KB	20,0 KB
[2 Files]	38,2 KB	44,0 KB
Chameleon HaaS TOS gr.docx	20,3 KB	24,0 KB
Chameleon HaaS TOS en.docx	17,8 KB	20,0 KB
Diagram project files	16,5 MB	16,5 MB
Template	8,0 MB	8,0 MB
TemplateDNDEC.lsc	1,0 MB	1,0 MB
TemplateMUR.lsc	1,0 MB	1,0 MB
TemplateMURDNDEC.lsc	1,0 MB	1,0 MB
TemplateMUREC.lsc	1,0 MB	1,0 MB
TemplateDND.lsc	1,0 MB	1,0 MB
TemplateMURDND.lsc	1,0 MB	1,0 MB
TemplateEC.lsc	1,0 MB	1,0 MB
TemplateNull.lsc	997,1 KB	1,0 MB
Chameleon HaaS TOS gr.docx	20,3 KB	24,0 KB
Chameleon HaaS TOS en.docx	17,8 KB	20,0 KB
Default	7,6 MB	7,6 MB
Default.lsc	984,7 KB	988,0 KB
DefaultMURDND.lsc	977,9 KB	980,0 KB
DefaultMUREC.lsc	968,1 KB	972,0 KB
DefaultDNDEC.lsc	967,3 KB	968,0 KB
DefaultDND.lsc	959,3 KB	960,0 KB
DefaultMUR.lsc	960,0 KB	960,0 KB
DefaultEC.lsc	952,8 KB	956,0 KB
DefaultNull.lsc	944,1 KB	948,0 KB
Chameleon HaaS TOS gr.docx	20,3 KB	24,0 KB
Chameleon HaaS TOS en.docx	17,8 KB	20,0 KB
[3 Files]	983,4 KB	992,0 KB
Default Alter Scenes.lsc	945,3 KB	948,0 KB
Chameleon HaaS TOS gr.docx	20,3 KB	24,0 KB
Chameleon HaaS TOS.en.docx	17,8 KB	20,0 KB
Documentation	37,9 MB	37,9 MB
Ελληνικά	19,9 MB	19,9 MB
Chameleon HaaS- Εγχειρίδιο Χρήστης Συστήματος.pdf	18,6 MB	18,6 MB
Chameleon HaaS- Συνοπτικό Τεχνικό Εγχειρίδιο.pdf	1,3 MB	1,3 MB
Διάβισσε με.txt	197 Bytes	0 Bytes
English	18,0 MB	18,0 MB



Name	Size	Allocated ▾
Chameleon HaaS- System technical manual.pdf	16,7 MB	16,7 MB
Chameleon HaaS- Short guide.pdf	1,3 MB	1,3 MB
- License Loader	33,1 MB	33,1 MB
Chameleon License Loader setup x32.exe	17,0 MB	17,0 MB
Chameleon License Loader setup x64.exe	16,1 MB	16,1 MB
- LOGO Hotel Configurator	5,8 MB	5,9 MB
[4 Files]	4,0 MB	4,0 MB
LOGO Hotel Configurator 64 bit installer.exe	2,1 MB	2,1 MB
LOGO Hotel Configurator 32 bit installer.exe	1,9 MB	1,9 MB
Read me.txt	144 Bytes	0 Bytes
Διάβαστε με.txt	262 Bytes	0 Bytes
Default export files	1,9 MB	1,9 MB
Ελληνικά	1,0 MB	1,1 MB
Scenes Template.pdf	412,1 KB	416,0 KB
IO Setting.pdf	172,8 KB	176,0 KB
Connections.pdf	141,9 KB	144,0 KB
Sensors.pdf	129,3 KB	132,0 KB
Scenes.pdf	125,8 KB	128,0 KB
Circuits.pdf	74,5 KB	76,0 KB
LOGO Hotel Configurator LOGO! import.csv	4,1 KB	8,0 KB
LOGO! instructions.txt	332 Bytes	0 Bytes
English	843,5 KB	856,0 KB
IO Setting.pdf	190,8 KB	192,0 KB
Connections.pdf	147,3 KB	148,0 KB
Scenes.pdf	145,5 KB	148,0 KB
Scenes Tempalte.pdf	140,2 KB	144,0 KB
Sensors.pdf	127,3 KB	128,0 KB
Circuits.pdf	88,3 KB	92,0 KB
LOGO Hotel Configurator 64 bit LOGO! import.csv	3,8 KB	4,0 KB
LOGO! instructions.txt	327 Bytes	0 Bytes
- Software tools	1,9 MB	1,9 MB
Simple IP Config 2.9.7.exe	1,6 MB	1,6 MB
IP Migration Tool installer.exe	330,4 KB	332,0 KB
Room number list.xlsx	14,5 KB	16,0 KB
- Specification	1,5 MB	1,5 MB
Ελληνικά	774,8 KB	776,0 KB
Chameleon HaaS - Τεχνική Περιγραφή.pdf	774,8 KB	776,0 KB
English	737,2 KB	740,0 KB
Chameleon HaaS - Technical description EN.pdf	737,2 KB	740,0 KB
- ETS Project file	475,3 KB	476,0 KB
Chameleon HaaS.knxproj	475,3 KB	476,0 KB
- Terms of Service	38,2 KB	44,0 KB
Ελληνικά	20,3 KB	24,0 KB
Chameleon HaaS TOS.docx	20,3 KB	24,0 KB
English	17,8 KB	20,0 KB
Chameleon HaaS TOS.docx	17,8 KB	20,0 KB



Appendix F – Online video guides table



APPENDIX F

Online video guides table

A series of online short video guides are uploaded on our YouTube channel, describing necessary actions and providing assistance for the programming and configuration of Chameleon HaaS system. In the table below, you can find the available video guides, their description and a YouTube link to view the video online:

1. YouTube video library

SECTION	TITLE	DESCRIPTION	YOUTUBE LINK
LOGO Hotel Configurator	LOGO Hotel Configurator Main Page Basics	Instruction about the main page of the Configurator tool – Basic functions	https://youtu.be/occi150mm0c
	LOGO Hotel Configurator Main Page Advanced	Instruction about the main page of the Configurator tool – Advanced functions	https://youtu.be/L_y17KyPu5o
	LOGO Hotel Configurator Sensors Page	Instructions about the sensor (buttons) configuration page of the Configurator tool	https://youtu.be/qxF6DTQLOo
	LOGO Hotel Configurator Scenes Page	Instructions about the scene configuration page of the Configurator tool	https://youtu.be/rewySjBdSDU
	LOGO Hotel Configurator Export Project	How to export a project after completing the design steps of the Configurator	https://youtu.be/90IYei1OHmA
LOGO!	LOGO! Import names	How to import the .csv file with input/output names in LOGO!Soft comfort software	https://youtu.be/uoRdtFnbGyw
	LOGO! Download address only	How to download the default IP addresses to the LOGO! base modules	https://youtu.be/qh0jJoXoo7c



SECTION	TITLE	DESCRIPTION	YOUTUBE LINK
LOGO!	LOGO! Diagram Program from instructions	How to use the instructions from Configurator software to complete the LOGO! diagram project	https://youtu.be/QPE-9EeGkpE
	LOGO! Copy Diagram to Network project	How to copy your finished diagram program to the LOGO! network project of your hotel	https://youtu.be/y4mXHM-QHyc
	LOGO! Change IP	How to change the default IP address of a LOGO! base module	https://youtu.be/ICLXYZtWuqU
	LOGO! Download (Batch and copy to SD)	How to use batch download to program all LOGO! base modules of your project simultaneously and copy the program to SD card	https://youtu.be/chUU9DXQWFs
	ComfortClick: LOGO! Change IP	How to change the IP addresses of LOGO! base module devices in Comfort Click visualization	https://youtu.be/WGDP6VysWmA
Comfort Click	ComfortClick: Set own IP	How to set the IP address of Comfort Click visualization server software	https://youtu.be/ox1HJ31HvoQ
	ComfortClick: Change own IP	How to change the IP address of Comfort Click visualization server software	https://youtu.be/vkLO8IO746w
	ComfortClick Check in/Check out (PMS/HMS)	How to Check-in/Check-out guest from the visualization software	https://youtu.be/l3rMzYUXmP0
	ComfortClick Main Page	Visualization main page functions	https://youtu.be/qJVQNkZ4l54
	ComfortClick Room Page	Visualization room page functions	https://youtu.be/y66QvTiPgAA
	ComfortClick Maintenance Page	Visualization maintenance page functions	https://youtu.be/7gqPJQvvbQo
	ComfortClick Admin Page	Visualization admin page functions	https://youtu.be/eZZiU1DXW08
	ComfortClick: LOGO! Change IP	How to change the IP addresses of LOGO! base module devices in Comfort Click visualizations	https://youtu.be/WGDP6VysWmA
	ComfortClick: OPTA Change IP	How to change the IP that is set in Comfort Click for the OPTA licensing device	https://youtu.be/kiN4uLkRWSK



SECTION	TITLE	DESCRIPTION	YOUTUBE LINK
Comfort Click	ComfortClick: KNX IP Router Change IP	How to change the IP address of the KNX/IP router that Comfort Click visualization uses to connect to the KNX network	https://youtu.be/8bhGDEcjiEw
Comfort Click Operation	ComfortClick Check in/Check out (PMS/HMS)	How to Check-in/Check-out guest from the visualization software	https://youtu.be/l3rMzYUXmPO
	ComfortClick Main Page	Visualization main page functions	https://youtu.be/qJVQNkZ4l54
	ComfortClick Room Page	Visualization room page functions	https://youtu.be/y66QvTiPgAA
	ComfortClick Maintenance Page	Visualization maintenance page functions	https://youtu.be/7gqPJQvvbQo
	ComfortClick Admin Page	Visualization admin page functions	https://youtu.be/eZZiU1DXW08
ETS	ETS: CMK2000 Change IP	How to change the IP address and LOGO! master address in CMK2000 device	https://youtu.be/VHFO-iGFUgl
	ETS KNX IP routers Change IP	How to change the IP addresses of KNX/IP routers	https://youtu.be/JmJFxU7pvPU
HOW TO: IP MIGRATION	IP Migration	How to use "IP MIGRATION" to generate instructions on how to change the default IP of every project device	https://youtu.be/74S0bfP8eE8
	ComfortClick: Change own IP	How to change the IP addresses of LOGO! base module devices in Comfort Click visualization	https://youtu.be/vkLO8IO746w
	OPTA Change IP	How to change the IP address of OPTA	https://youtu.be/zEGYeb-qFdQ
	ComfortClick: LOGO! Change IP	How to change the IP addresses of LOGO! base module devices in Comfort Click visualizations	https://youtu.be/WGDP6VysWmA
	ComfortClick: OPTA Change IP	How to change the IP that is set in Comfort Click for the OPTA licensing device	https://youtu.be/kiN4uLkRWSK
	ComfortClick: KNX IP Router Change IP	How to change the IP address of the KNX/IP router that Comfort Click visualization uses to connect to the KNX network	https://youtu.be/8bhGDEcjiEw



SECTION	TITLE	DESCRIPTION	YOUTUBE LINK
HOW TO: IP MIGRATION	ETS: CMK2000 Change IP	How to change the IP address and LOGO! master address in CMK2000 device	https://youtu.be/VHFO-iGFUgl
	ETS KNX IP routers Change IP	How to change the IP addresses of KNX/IP routers	https://youtu.be/JmJFxU7pvPU
	LOGO! Change IP	How to change the default IP address of a LOGO! base module!	https://youtu.be/ICLXYZtWuqU
FINDER OPTA	OPTA Commissioning Part 1	OPTA licensing device programming instructions – Request license file	https://youtu.be/gdhQBVnwucU
	OPTA Commissioning Part 2	OPTA licensing device programming instructions – Install license file	https://youtu.be/ogtoeNX4U3E
	OPTA Change IP	How to change the IP address of OPTA	https://youtu.be/zEGYeb-qFdQ
Chameleon HaaS	Chameleon HaaS Introduction - GR	Introduction video of the Chameleon HaaS System – Greek	https://youtu.be/J5LjUkIY0A8
	Chameleon HaaS Introduction - EN	Introduction video of the Chameleon HaaS System – English	https://youtu.be/o9LP3BNHEY8



Appendix G – Bill of Materials

APPENDIX G

Bill of Materials

Chameleon HaaS system solution can be installed in hotel units ranging from 10 to 90 rooms. A single order can be placed for the total sum of required system components, or partial consequent orders can be placed in different phases, with the limitation that a hotel project can be a maximum of 90 rooms.

1. Devices / Parts of the system:

The system comprises of 5 different product categories:

- LOGO! devices (base module, expansion module and power supply). All LOGO! devices are installed inside the guest room, except for the power supply for CMK2000 (gateway, installed in common areas)
- KNX devices. An A/C unit gateway device from Airzone is installed in each guest room for HVAC integration, while a CMK2000 gateway device from Siemens is installed per 5 rooms in the common areas' consumer unit to implement KNX to LOGO! bidirectional communication. There is an optional KNX component, an external brightness sensor TR/A 1.1 from ABB, which we must order if we plan to implement Bright/Dark scenes. Only one external brightness sensor is used per project
- ComfortClick visualization software (bOS PRO License) installed on a PC at the reception or on the hotel's server
- OPTA programmable logic controller from Finder. Only one OPTA device is required per hotel project, and it activates the license for the installed Chameleon HaaS system and number of hotel rooms we ordered. The hotel automation system will not operate without a valid OPTA device and license. In case of a hardware fault, we must replace OPTA device and reactivate the license within 30 days. The price of the license and OPTA device is included in Chameleon HaaS and does not require any subscription. The device can be installed in any common areas' consumer unit
- An important part of the system, even if they are not programmable devices, are the conventional presence detectors and at least 2 must be installed in each room

The minimum order for a Chameleon HaaS system is 10 rooms and includes all the necessary guest room automation components as well as all common areas and topology devices required. Visualization software and OPTA device are also included.

Only one Finder OPTA PLC and one bOS visualization PRO License are necessary for each hotel project, regardless of the number of hotel rooms.

HaaS Chameleon Base includes the necessary order codes for the first 10 rooms of a hotel project, while HaaS Chameleon Base Premium, in addition to the order codes for the first 10 rooms, offers 5 hours of remote technical support from OWL Automata as well.

We can use the BOM calculator of the LOGO Hotel Configurator software to easily calculate the necessary bill of materials (along with their pricelist) for a hotel unit with known total number of rooms (in the pictures below, an example BOM for a hotel with 31 rooms is calculated).

First, we have to enter the details for our project:

Bill Of Materials calculation

Rooms:	31	KNX lines:	1
New hotel?	<input checked="" type="checkbox"/>		
Brightness sensor?	<input checked="" type="checkbox"/>		
Technical support?	<input checked="" type="checkbox"/>		
OK	Aidoo type: AZAI6KNXLGE		

The total price for a specific number of rooms (in our example it is 31) can vary depending on our choice of whether we want a premium technical support package, additional KNX lines and/or external brightness sensor (one per project).

Project Data		
Number of Hotel Rooms	31	
Number of KNX lines	1	
Base package	1	
Brightness sensor	1	

BOM Codes		
Code	Name	Quantity
HC-B	HaaS Chameleon Base	1
HC-R	HaaS Chameleon Room	21
HC-CMK	Chameleon CMK topology	5
HCS-KT	HaaS Chameleon Siemens KNX topology	1
HCA-LS	HaaS Chameleon ABB TR/A Lux Sensor	1

Components			
Order code	Type	Quantity	Internet page
6ED1052-2MD08-0BA1	LOGO! 12/24RCEO	31	SIEMENS LOGO!
6ED1055-1NB10-0BA2	LOGO! DM 16 24R	31	SIEMENS LOGO!
	Aidoo KNX Inverter/VRF	31	Airzone
6EP3331-6SB00-0AY0	LOGO! Power 24 V / 1.3 A	31	SIEMENS LOGO!
6BK1700-0BA20-0AA0	LOGO! CMK2000	7	SIEMENS LOGO!
6EP3330-6SB00-0AY0	LOGO! Power 24 V / 0.6 A	7	SIEMENS LOGO!
N/A	Pro	1	Comfort Click
N/A	0 489 41	62	Legrand
N/A	OPTA Lite	1	Arduino
5WG1125-1AB22	N 125/22 KNX PSU	1	SIEMENS KNX
5WG1146-1AB03	N 146/03 IP/KNX router	1	SIEMENS KNX
2CDG120060R0011	TR/A1.1 Time Receiver GPS, SM	1	ABB KNX

Chameleon license (2024)	€	
HC.CC.ASU.1.21.1.1	€	

The listed prices do not include VAT and refer only to the purchase of the Chameleon license. Request a quote before placing an order

Remote technical support package (5 hours)	€	
HC.CC.BA.PRE	€	

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The BOM calculator offers the option to calculate the necessary order codes for an expansion of a hotel project that already has Chameleon HaaS system installed (the total number of rooms, existing and expansion, must not exceed the maximum 90 rooms allowed by the system). We can also add more KNX lines or external brightness sensor.

Bill Of Materials calculation

Rooms:	10	KNX lines:	
New hotel?	<input type="checkbox"/>	Existing rooms:	31
Brightness sensor?	<input type="checkbox"/>	Existing KNX lines:	1
Technical support?	<input type="checkbox"/>		
OK		Aidoo type:	AZAI6KNXLGE

Project Data	
Number of new Hotel Rooms	10
Number of additional KNX lines	0
Brightness sensor	0
Number of existing Hotel Rooms	31
Number of existing KNX lines	1

BOM Codes		
Code	Name	Quantity
HC-R	HaaS Chameleon Room	10
HC-CMK	Chameleon CMK topology	2
HCS-KT	HaaS Chameleon Siemens KNX topology	0
HCA-LS	HaaS Chameleon ABB TR/A Lux Sensor	0

Components			
Order code	Type	Quantity	Internet page
6ED1052-2MD08-0BA1	LOGO! 12/24RCEO	10	SIEMENS LOGO!
6ED1055-1NB10-0BA2	LOGO! DM 16 24R	10	SIEMENS LOGO!
AZAI6KNXLGE	Aidoo KNX Inverter/VRF	10	Airzone
6EP3331-6SB00-0AY0	LOGO! Power 24 V / 1.3 A	10	SIEMENS LOGO!
6BK1700-0BA20-0AA0	LOGO! CMK2000	2	SIEMENS LOGO!
6EP3330-6SB00-0AY0	LOGO! Power 24 V / 0.6 A	2	SIEMENS LOGO!
N/A	0 489 41	20	Legrand
5WG1125-1AB22	N 125/22 KNX PSU	0	SIEMENS KNX
5WG1146-1AB03	N 146/03 IP/KNX router	0	SIEMENS KNX
2CDG120060R0011	TR/A1.1 Time Receiver GPS, SM	0	ABB KNX

Chameleon license (2024)

HC.CC.ASU.0.10.0.0

€

The listed prices do not include VAT and refer only to the purchase of the Chameleon license. Request a quote before placing an order

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2. How do I know if I need additional KNX lines?

The criterion for mandatory additional KNX lines is the number of buildings in our hotel project. Assuming that our previous example of a hotel with 31 rooms has 5 different buildings, then we should choose 5 KNX lines during calculation and ordering stage.

3. External brightness sensor TR/A 1.1

The system offers Bright/Dark scene as an option. If we select this option for a button, two scenes are available with the press of the button, depending on brightness level. As an example, in TV scene we would prefer to turn off all the lights that might reflect on the screen, while simultaneously turning on the ambient light or office desk light. By choosing the option Bright/Dark for the TV button, if the room does not have sufficient brightness, the lights will turn on, otherwise the lights will remain off.

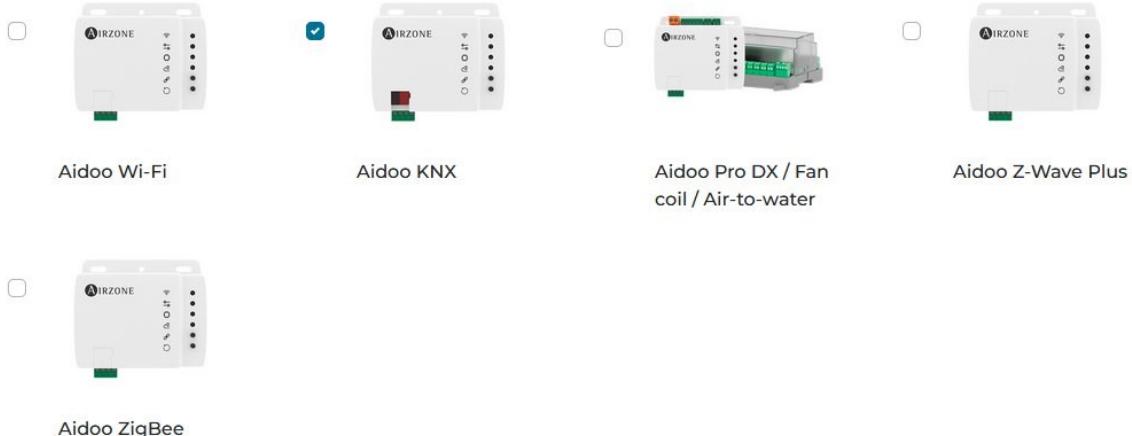
If TR/A 1.1 external brightness sensor is not installed in our project, Bright/Dark scenes do not work and **the “Dark” output is always activated**.

4. Placing the order for Aidoo KNX Inverter/VRF gateway

We must make sure that our A/C unit that will be installed in the guest rooms of our hotel project is compatible with the **Aidoo KNX Inverter/VRF gateway**, before placing our order. You can use the following link to check your A/C unit compatibility: <https://www.airzonecontrol.com/eu/en/projects/web-tools/compatibilities/aidoo/>

First, we must choose “**Aidoo KNX**” option:

Select your device



Then, we must choose the manufacturer and unit model, from the drop-down menus (see picture below):



Select a brand

LG

X V

Can't find your unit? [Get in touch with us](#)

Select a unit

CL24F.N30

- UM24FH.N20
- ZBNW30GM2H1
- UM30FH.N20
- ZBNW36GM3H1
- UM36FH.N30
- ZBNW42GM3H1
- UM42FH.N30
- ZBNW48GM3H1
- UM48FH.N30
- UL12FH.N50
- UL18FH.N30
- CL24F.N30

For the CL24F.N30 unit your Airzone referen

AZAI6KNXLGE

Aidoo KNX LG

The Aidoo includes:

- Connection cable to the indoor unit.
- Screws and double-sided adhesive tape for assembly.

The page will show the gateway model that we need to order if there is compatibility with our A/C unit model. It should be noted that the price of the gateway remains the same, regardless of the model.

The example shown in the pictures assumes an A/C unit by LG, type CL24F.N30. The compatible gateway model that we must order is AZAI6KNXLGE.

We must be absolutely sure of the exact type of the A/C unit that will be installed in our hotel project, before placing the order for the gateway.



Appendix H – LOGO Hotel Configurator default export files



APPENDIX H

LOGO Hotel Configurator default export files

1. Default configuration

Chameleon HaaS offers a predefined hotel guest room configuration, derived from the most common practices of the hospitality market, covering a wide variety of a typical guest room needs. The default configuration includes:

On/off control of room loads

- Έλεγχος του κυκλώματος ρευματοδοτών
- Control of the AC on/off contact of the A/C unit
- Make up Room και Do not Disturb light indication control
- Control of 8 lighting circuits – Foyer, bathroom, balcony, right and left bedside, desk, bedroom and bedroom concealed lighting

Conventional push button inputs

- Make up Room and Do not disturb
- Emergency cord button for the bathroom
- 8 push buttons for scene activation – Master on, romantic, night and TV (4 on the left side of the bed and 4 on the right side of the bed, parallel connection in common input for the same function)
- 6 push buttons for direct lighting control (1—1)

Auxiliary contact inputs

- Entrance door magnetic contact
- Balcony door or window contact
- Conventional presence detectors output signal (connected through a pilot relay with 230 V AC coil)

All the exported files for LOGO Hotel configurator software, based on the configuration mentioned above, are available in the following folder:

- Chameleon HaaS/LOGO Hotel Configurator/Default export files

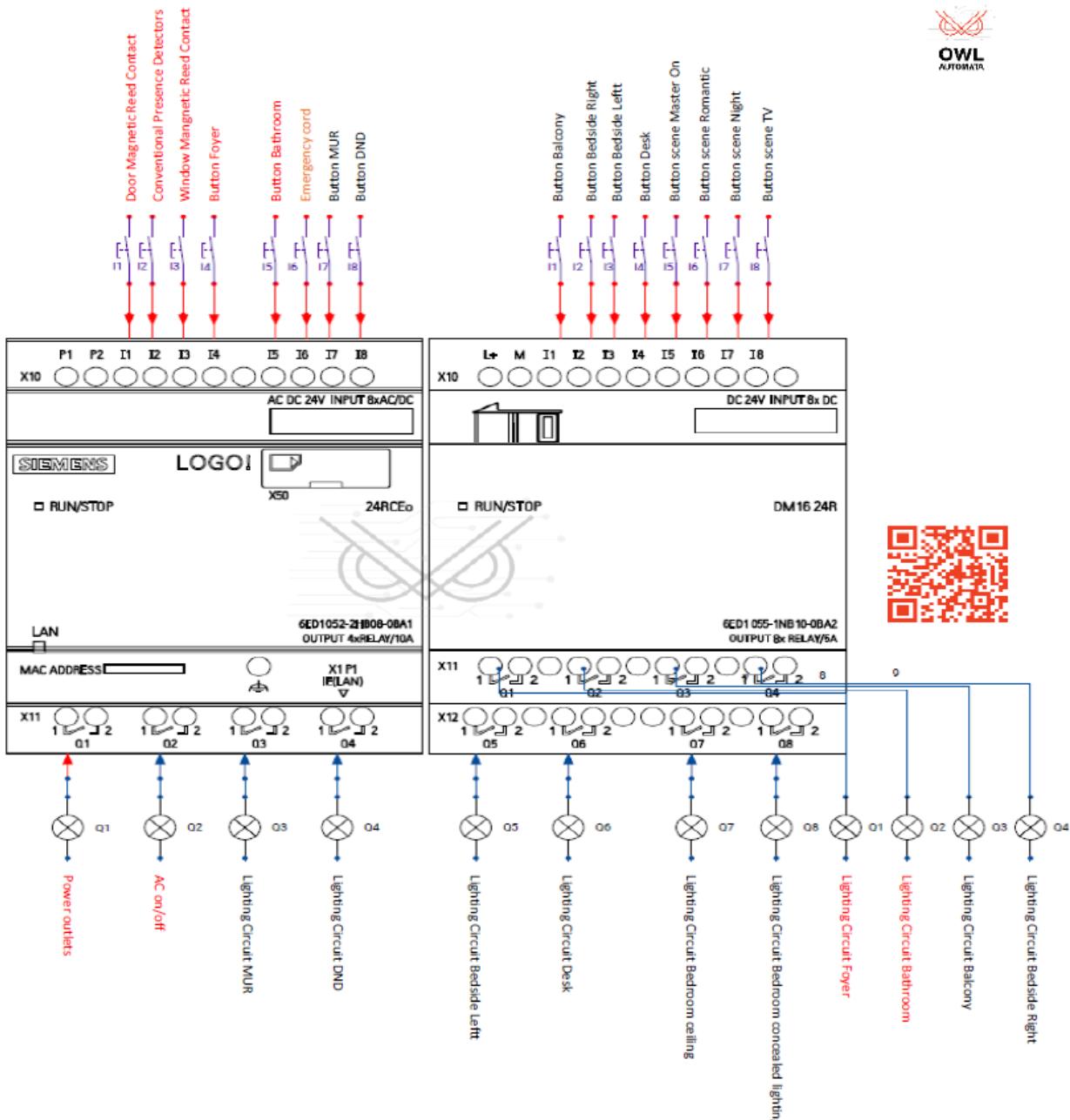
In the following pages, you can find the exported files of the default configuration.

1.1. Circuits

Welcome Guest	Guest Out	Master On	Romantic	Night	Night (Toggle)	TV	Foyer	Bathroom	Balcony	Bedside Right	Bedside Leftt	Desk
Oc Guest In	Oc Guest Out	I13 (Out)	I14 (Out)	I15 (Out)	I15 (Toggle)	I16 (Out)	I4 (Out)	I5 (Out)	I9 (Out)	I10 (Out)	I11 (Out)	I12 (Out)
Q5 Set (In)	Q5 Unset (In)	Q6 Set (In)	Q5 Unset (In)	Q5 Unset (In)	Q5 Set (In)	Q5 Unset (In)	Q5 (Button)	Q6 (Button)	Q7 (Button)	Q8 (Button)	Q9 (Button)	Q10 (Button)
Q6 Set (In)	Q6 Unset (In)	Q11 Set (In)	Q7 Unset (In)	Q6 Unset (In)	Q6 Unset (In)	Q8 Unset (In)						
Q7 Unset (In)	Q12 Set (In)	Q8 Unset (In)	Q7 Unset (In)	Q7 Unset (In)	Q7 Unset (In)	Q9 Unset (In)						
Q8 Unset (In)		Q9 Unset (In)	Q8 Unset (In)	Q8 Unset (In)	Q8 Unset (In)	Q10 Set (In)						
Q9 Unset (In)		Q10 Unset (In)	Q9 Unset (In)	Q9 Unset (In)	Q9 Unset (In)	Q11 Unset (In)						
Q10 Unset (In)		Q11 Unset (In)	Q10 Unset (In)	Q10 Unset (In)	Q10 Unset (In)	Q12 Set (In)						
Q11 Unset (In)		Q12 Set (In)	Q11 Unset (In)	Q11 Unset (In)								
Q12 Unset (In)			Q12 Unset (In)	Q12 Unset (In)								

1.2. Connections

Connections





1.3. IO setting

IO setting

LOGO! 12/24RCEO, 8DI/4DO		Description	Load/Scene name	Type of scene	Type	Controlled output	Room	+
Inputs	I1	Door Magnetic Reed Contact			Aux (NC)		Generic	
	I2	Conventional Presence Detectors			Aux		Generic	
	I3	Window Magnetic Reed Contact			Aux (NC)		Generic	
	I4	Button Foyer	Foyer		1-1	Q5	Foyer	
	I5	Button Bathroom	Bathroom		1-1	Q6	Foyer	
	I6	Emergency cord	Emergency cord		Aux		Generic	
	I7	Button MUR	MUR		1-1	Q3	Foyer	
	I8	Button DND	DND		1-1	Q4	Foyer	
Outputs	Q1	Power outlets	Power outlets		General Load			
	Q2	AC on/off	AC on/off		General Load			
	Q3	Lighting Circuit MUR	MUR		Lighting Circuit			
	Q4	Lighting Circuit DND	DND		Lighting Circuit			
LOGO! DM16 24R Exp. mod, 8DI/8DO		Description	Load/Scene name	Type of scene	Type	Controlled output	Bedroom	
Inputs	I9	Button Balcony	Balcony		1-1	Q7	Balcony	
	I10	Button Bedside Right	Bedside Right		1-1	Q8	Bed R	
	I11	Button Bedside Leftt	Bedside Leftt		1-1	Q9	Bed L	
	I12	Button Desk	Desk		1-1	Q10	Desk	
	I13	Button scene Master On	Master On	Default	Scene		Bed L/R	
	I14	Button scene Romantic	Romantic	Default	Scene		Bed L/R	
	I15	Button scene Night	Night	Toggle	Scene		Bed L/R	
	I16	Button scene TV	TV	Default	Scene		Bed L/R	
Outputs	Q5	Lighting Circuit Foyer	Foyer		Lighting Circuit			
	Q6	Lighting Circuit Bathroom	Bathroom		Lighting Circuit			
	Q7	Lighting Circuit Balcony	Balcony		Lighting Circuit			
	Q8	Lighting Circuit Bedside Right	Bedside Right		Lighting Circuit			
	Q9	Lighting Circuit Bedside Leftt	Bedside Leftt		Lighting Circuit			
	Q10	Lighting Circuit Desk	Desk		Lighting Circuit			
	Q11	Lighting Circuit Bedroom ceiling	Bedroom ceiling		Lighting Circuit			
	Q12	Lighting Circuit Bedroom concealed lighting	Bedroom concealed lighting		Lighting Circuit			



1.4.Scenes

Scenes

Scenarios	7	Welcome Guest	Guest Out	Master On	Romantic	Night	Night (Toggle)	TV
Circuits		Oc Guest In	Oc Guest Out	I13 (Out)	I14 (Out)	I15 (Out)	I15 (Toggle)	I16 (Out)
Q5	Foyer	+	-		-	-	+	-
Q6	Bathroom	+	-	+		-	-	
Q7	Balcony		-		-	-	-	
Q8	Bedside Right		-		-	-	-	
Q9	Bedside Leftt		-		-	-	-	
Q10	Desk		-		-	-	-	+
Q11	Bedroom ceiling		-	+	-	-	-	
Q12	Bedroom concealed lighting		-	+	+	-	-	+



1.5.Scenes Template

Scenes

Scenarios	7	Welcome Guest	Guest Out	Master On	Romantic	Night	Night (Toggle)	TV
Circuits		Oc Guest In	Oc Guest Out	I13 (Out)	I14 (Out)	I15 (Out)	I15 (Toggle)	I16 (Out)
Q5	Foyer							
Q6	Bathroom							
Q7	Balcony							
Q8	Bedside Right							
Q9	Bedside Leftt							
Q10	Desk							
Q11	Bedroom ceiling							
Q12	Bedroom concealed lighting							



1.6. Sensors

Sensors

Foyer	Foyer	Bathroom	MUR	DND
Balcony	Balcony			
Bed R	Bedside Right	Master On	Romantic	Night
Bed L	Bedside Leftt	Master On	Romantic	Night
Desk	Desk		TV	





1.7.LOGO! instructions

You have chosen a room with Make Up my Room, Do Not Distrurb, Emergency cord. Choose from the Network projects folder, the files located in Network projects complete diagrams folder. The files (Network_project_Roomsxxtoxx.snp) are ready for download to LOGO!. Make sure that you have a proper visualization and room drawings.