

2.1

ekinex
CONTROL YOUR LIVING SPACE

General Functions

System Configuration Manual



DELÉGO SERVER

Visualisation webserver

EK-DEL-SRV01 / EK-DEL-SRV01-M

Index

1 Introduction.....	5
1.1 Scope of this user manual.....	5
1.2 Conventions.....	6
1.3 Safety information.....	6
1.4 Warnings.....	6
1.5 Copyright.....	7
1.6 Open Source Licenses.....	7
1.7 More information.....	7
2 General overview.....	8
2.1 What is Delégo Server.....	8
2.2 System architecture.....	8
2.3 Technical data.....	9
2.4 Licenses and vouchers.....	9
3 Preliminary setup.....	11
3.1 Overview.....	11
3.2 Connection to the KNX bus.....	12
3.3 Network connection.....	12
3.4 First access.....	13
3.5 Manual IP address restore.....	14
3.6 Database reset.....	14
4 Graphical interface and navigation.....	15
4.1 Spaces.....	15
4.2 Administration view.....	15
4.2.1 Toolbar.....	17
4.2.2 Navigation menu.....	18
4.2.3 Search.....	19
4.2.4 Workspace.....	20
4.2.5 Message center.....	20
4.3 Visualization view.....	21
4.3.1 Navigation.....	21
4.3.2 Floors and rooms.....	22
4.3.3 Widgets.....	22
4.3.4 Functions.....	23
4.3.5 Favourites.....	24
5 Setup.....	25
5.1 Project Settings.....	25
5.1.1 Name and Location.....	25
5.1.2 Language.....	25
5.1.3 Date/Time.....	26
5.1.4 Access with QR code.....	28
5.1.5 Weather service.....	30
5.2 LAN Network.....	31
5.3 Ekinex Cloud.....	33
5.4 Backup/Restore.....	34
5.5 Software update.....	34

5.6 Users and permissions.....	35
5.6.1 Users and user groups.....	35
5.6.2 Creating a new user.....	35
5.6.3 User groups and access rights.....	36
5.6.4 Exclusively owned objects.....	37
5.6.5 Default passwords.....	37
5.6.6 Password change.....	38
5.6.7 Access log.....	38
5.7 Licenses and modules.....	38
5.8 Maintenance.....	39
5.9 External memory management.....	40
6 User Interface.....	41
6.1 Floors/Rooms.....	41
6.2 Widgets association.....	43
6.3 Map customization.....	44
6.4 Homepage.....	45
6.5 Navigation menu.....	46
6.6 Functions.....	47
6.7 Links.....	47
6.7.1 Opening third-party apps.....	48
6.7.2 Adding links to the navigation menu.....	48
7 Schedules.....	49
7.1 Configuration.....	49
7.2 Active schedules visualisation.....	49
7.2.1 Schedules overview.....	49
7.2.2 Preview in widgets popup.....	50
7.2.3 Context edit menu.....	50
7.3 Daily profiles.....	51
7.3.1 Weekly profiles.....	51
7.3.2 Exceptions.....	51
7.3.3 Disabling profiles.....	52
7.3.4 Actions.....	52
8 Basic functions.....	54
8.1 Scenes.....	54
8.1.1 Creating a scene in the Administration view.....	54
8.1.2 Adding an action to a scene.....	55
8.1.3 Delays.....	56
8.1.4 Creating a scene in the Visualisation view.....	57
8.1.5 Executing scenes.....	58
8.2 Virtual objects.....	59
8.3 Circadian.....	60
9 Notifications.....	62
9.1 On-screen notifications.....	62
9.2 Email notifications.....	63
9.3 Push notifications.....	64
9.4 Telegram notifications.....	64
9.5 Delégo Panel notifications.....	65

9.6 Notification log.....	66
10 Advanced functions.....	66
10.1 Generic Widgets.....	66
10.2 Combinatorial operators.....	66
10.2.1 Create a new operator.....	66
10.2.2 Add to a connection.....	67
10.2.3 Manual configuration.....	67
10.3 Value comparisons.....	68
10.3.1 Create a new comparison.....	68
10.3.2 Add to a connection.....	68
10.3.3 Manual configuration.....	69
10.4 Math operators.....	69
10.4.1 Create a new operator.....	69
10.4.2 Add to a connection.....	69
10.4.3 Manual configuration.....	70
10.5 Integrators.....	70
10.5.1 Create a new integrator.....	70
10.5.2 Add to a connection.....	70
10.5.3 Manual configuration.....	71
10.6 String pilots.....	71
10.7 Status byte.....	72
10.8 Repeaters.....	73
10.9 Semaphores.....	73
Example.....	74
10.10 System information.....	75
10.11 Clocks.....	75
10.12 Schedule managers.....	75
11 Presence simulator.....	77
12 Settings.....	78
12.1 Email settings.....	78
12.2 Graphic library settings.....	79
12.2.1 Creating a custom rendering.....	80
12.3 Advanced settings.....	82
12.4 Map View settings.....	83
12.5 Functions view settings.....	83
Compact.....	83
Dynamic.....	85
Floors.....	85
13 Revision history.....	87

1 Introduction

1.1 Scope of this user manual

This document is the main application user manual of DELÉGO SERVER, and contains all the necessary information for its configuration and use.

The present user manual is part of the suite of application manuals dedicated to DELÉGO SERVER, available on the section dedicated to this product in the EKINEX website. After reading this document, it is suggested to consult the specific application manuals for the technologies and/or applications required in your installation.

The following application manuals should be familiar:

REF	DOCUMENT	DESCRIPTION
[D1]	DOCUMENTATION PLAN	Overview of the application manuals of DELÉGO SERVER
[D2]	AUTOMATIONS - APPLICATION USER MANUAL	Methodologies for creating automations through the relationship between objects (TRIGGERS, CONNECTIONS and LOGICS).
[D3]	ONLINE SERVICES - APPLICATION USER MANUAL	Detailed overview of the cloud services that empower the webserver in its local functioning
[D4]	KNX - APPLICATION USER MANUAL	Configuration and visualisation of a KNX automation system in DELÉGO SERVER
[D5]	MODBUS - APPLICATION USER MANUAL	Configuration and visualisation of MODBUS devices in DELÉGO SERVER

These documents are available for download in the area of the EKINEX website dedicated to the webserver.

1.2 Conventions

The following conventions are used in this manual:

[KEY]	The keyboard keys that the installer must press are shown in square brackets
Courier	Software messages generated by the DELÉGO SERVER configuration software are reported in the "courier" font
Function name	Names of buttons, table fields or other graphic elements of the user interface of the DELÉGO SERVER configuration software are shown in italics
	Information note
	Important note that requires particular attention

1.3 Safety information

DELÉGO SERVER is a product intended for trained and specialized personnel only; before interacting with this device you must first read this user manual, in particular this safety information. This document supplements and does not replace any legislation or legal directives on safety.

The device has been developed following the safety regulations currently in force; however, it is not possible to exclude with certainty possible damage or interactions with other devices during its operation. The device complies with EMC guidelines and harmonized European standards; any modifications to the device may affect EMC compatibility.

The supply voltage must be strictly within the range indicated in the GENERAL FUNCTIONS application manual and on the device; risk of fire or explosion if powered outside this range. The CE declaration of conformity of the device can be requested from EKINEX®, at the references on the site www.ekinex-delego.com.



In compliance with Directive 2002/96/EC the DELÉGO SERVER electronic device must be disposed of in the appropriate facilities and not in the collection of solid urban waste.

1.4 Warnings

- This application manual is aimed for installers, system integrators and designers.
- The assembly, electrical connection, configuration and commissioning of the appliance can only be carried out by specialized personnel in compliance with the applicable technical standards and the laws in force in the respective countries
- Opening the appliance case causes the immediate interruption of the warranty period
- In the event of tampering, compliance with the essential requirements of the applicable directives for which the appliance has been certified is no longer guaranteed.
- EKINEX defective appliances must be returned to the manufacturer at the following address:
Ekinex S.p.A. Via Novara 37, 28010 Vaprio d'Agogna (NO)

1.5 Copyright

© Ekinex S.p.A. 2025

This application manual, the DELÉGO SERVER software and the DELÉGO iOS and Android apps are subject to copyright; all rights are reserved. Copying, reproduction, translation and/or modification, even partial, are expressly prohibited unless approved in writing by EKINEX®.

1.6 Open Source Licenses

DELÉGO SERVER contains open source software, such as the Linux operating system and its kernel. These software components are subject to various open-source licenses, including:

- GNU General Public License (GPL), <https://www.gnu.org/licenses/gpl-2.0.html>
- GNU Lesser General Public License (LGPL), <https://www.gnu.org/licenses/lgpl-2.0.en.html>

If you own a product, for a period of 3 years from the last production date, you can request from EKINEX the source code of the software components licensed under the GNU General Public License (GPL) or the GNU Lesser General Public License (LGPL), and use, distribute and modify them in accordance with the respective licenses.

EKINEX cannot be considered responsible in any way for the source code thus distributed, which is provided without guarantees. EKINEX cannot also be held responsible for any damage or consequence resulting from modifications (additions / removals) made to this software by third parties, unless specifically authorized.

1.7 More information

For further information on the product, you can contact EKINEX technical support® to the e-mail address: **support@ekinex.com** or consult the website www.ekinex.com

EKINEX® is a registered trademark of Ekinex S.p.A.

KNX® ed ETS® are registered trademarks of KNX Association cvba, Brussels

The company reserves the right to make changes to this documentation without notice.

2 General overview

2.1 What is Delégo Server

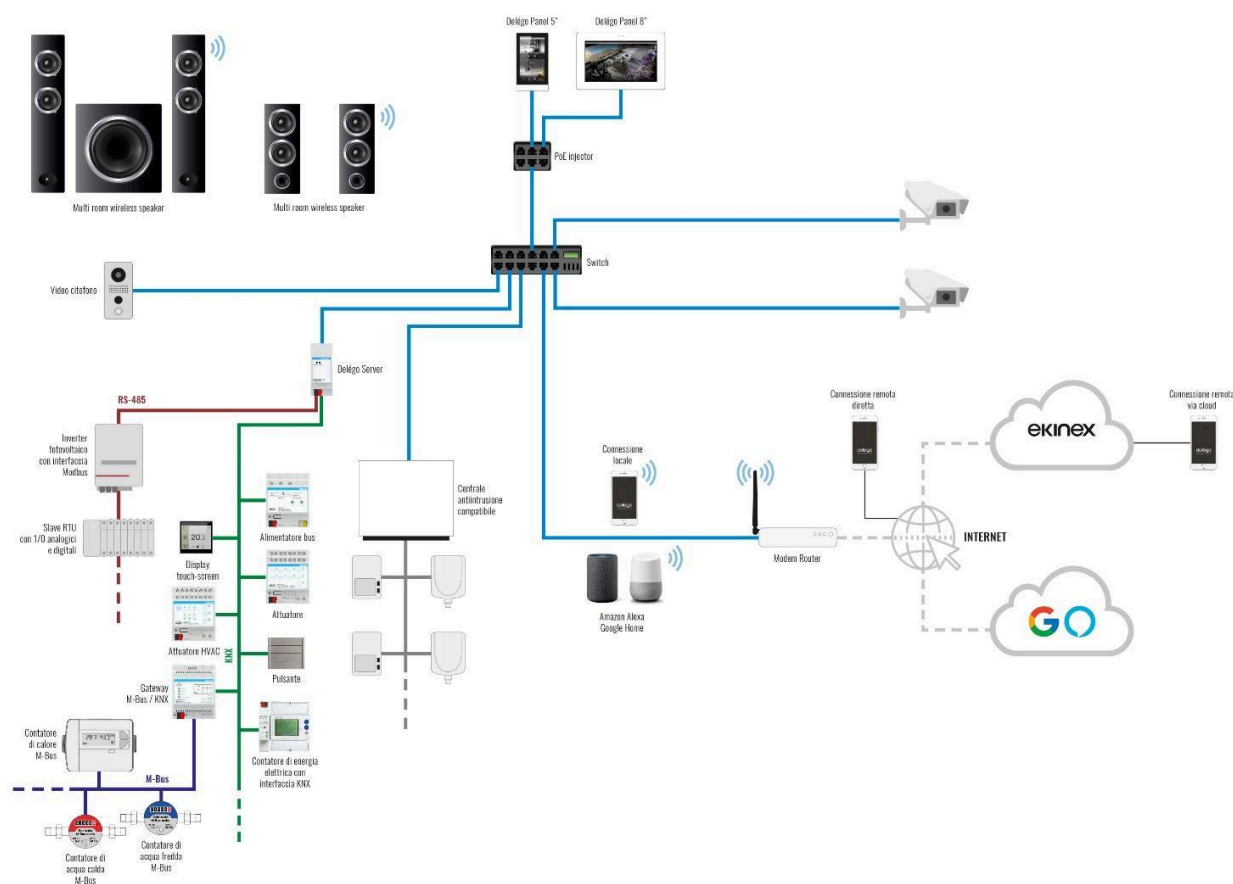
DELÉGO SERVER is a powerful visualisation server for connected buildings; it supports natively KNX, MODBUS and other communication protocols.

DELÉGO SERVER is not only a visualisation tool, but offers a rich set of automations to installers and system integrators. Being a webserver, it can be configured and used entirely with a web browser; end users are encouraged to interact with it by means of DELEGO mobile app, available for free on the Apple IOS App Store and Google Play Store for Android-powered mobile devices.

DELÉGO SERVER is designed to be installed in an electric cabined and be physically connected to the field buses (KNX, MODBUS...) and the local network. Although it can operate (and can be used via the app) locally, if connected to the internet it can be empowered by the Ekinex cloud with additional functions and services, like the voice control (with Alexa and Google) or the remote programming not only of the webserver, but also of the KNX and other devices.

2.2 System architecture

DELÉGO SERVER must be connected to the local network and the other technologies which require a physical connection, like the KNX bus, a MODBUS RTU line etc.



Thanks to the integrated support for several protocols, DELÉGO SERVER can interact and coordinate multiple technological systems, and present a unique interface for the control of the building, to the mobile app, PC/Mac with a web browser, and one or more DELÉGO PANEL.

2.3 Technical data

Power supply	12 Vdc / 24 Vdc via separate power supply not included in the supply Alternatively POE power supply
Consumption	Max 10W
Communication ports	1x KNX TP (twisted pair), 1x RS485, 1x RS232, 1x USB 2.0
Ethernet connection	RJ45
LED	Green POWER Red SERVICE
Operating temperature	0...+40 °C
Storage temperature	-10...+70 °C
Dimensions	72 x 90,5 x 62 mm (LxPxH), 4 UM (1 UM = 18 mm)
Material	Plastic case
Assembly	Design for mounting on 35 mm profile rail
Certifications	CE the product complies with the Low Voltage Directive (2014/35/EU) and to the Electromagnetic Compatibility Directive (2014/30/EU). Tests carried out in accordance with EN 50491-5-1:2010, EN 50491-5-3:2010.

2.4 Licenses and vouchers

After purchasing DELÉGO SERVER, most of the functions are already available in the product but some of them require activation via a license voucher, as well as extending the number of KNX addresses beyond the default limit. To activate a voucher, you need to log in to the technical portal on EKINEX's website

<https://voucher.ekinex.com>

In the REDEEM VOUCHER section it is possible to:

- Enter the VOUCHER code.
- Enter the unique serial number (SERIAL CODE) of the DELÉGO webserver.
- Specify which license you want to activate (if the voucher in question includes multiple options, in this case a third drop-down menu is highlighted).

Redeem voucher

Voucher

Voucher

Device serial code

Serial code

Generate license 

The unique serial number of the DELÉGO webserver can be found on the label printed on the side of the product or, if you do not have physical access to the device, by accessing the Administration view using a web browser, opening the section

SETUP > LICENSES AND MODULES

and identifying it at the top of the page. Once the license has been generated, proceed as follows:

- For KNX point upgrades, paste the code in the text box relating to the product (wording "Delégo")
- To enable additional modules (e.g. proprietary alarms), paste the code in the corresponding entry at the bottom of the page (e.g. "Tecnoalarm")

Once the licenses have been entered, confirm using the save button and wait for the page to reload. At the end of the procedure, check the correct application of the limits and active modules:

delégo

Search

Menu

- Setup
 - Project settings
 - Language
 - Network
 - Access with QR code
 - Backup/Restore
 - Software update
 - Date/Time
 - Licenses and modules
 - Maintenance
 - VPN
 - External memory management
- Technologies
- Floors
- Functions
- Scenes
- Notifications
- Connections
- Logics

Serial code

30105612

Hardware code

D1:7B:FE:CA:D5:D6:5C:BE:CC:7A:64:10:95:EC:0F:6E

Delégo

A7:83:9A:2B:F5:13:B2:C7:1B:AF:63:49:9F:9B:64:3D

Valid license (Version Standard)

KNX

0B:E6:8D:A6:31:67:73:69:6A:D0:F8:F7:A9:D5:02:AE

Valid license (95/1500 KNX group addresses)

Modbus

51:8A:1D:E3:89:DE:B5:63:6A:A6:F0:A7:B3:7F:34:12

Valid license (0/1000 Registers)

MBUS

5E:E3:4D:04:0D:58:7A:A3:7C:90:7E:40:92:F1:92:39

Valid license

TecnoAlarm

No license

Paradox EVO

No license

EL.MQ. / IESS

No license

Absoluta

No license

Axel

No license

VoIP Intercom

E5:17:FC:A6:DC:71:2A:9B:37:E1:3C:D8:E4:41:33:71

Valid license

Accédo

2D:A1:A0:2D:89:86:79:0D:C3:C1:24:24:43:64:D7:9D

Valid license (1/4 Rooms)

Licenses and modules

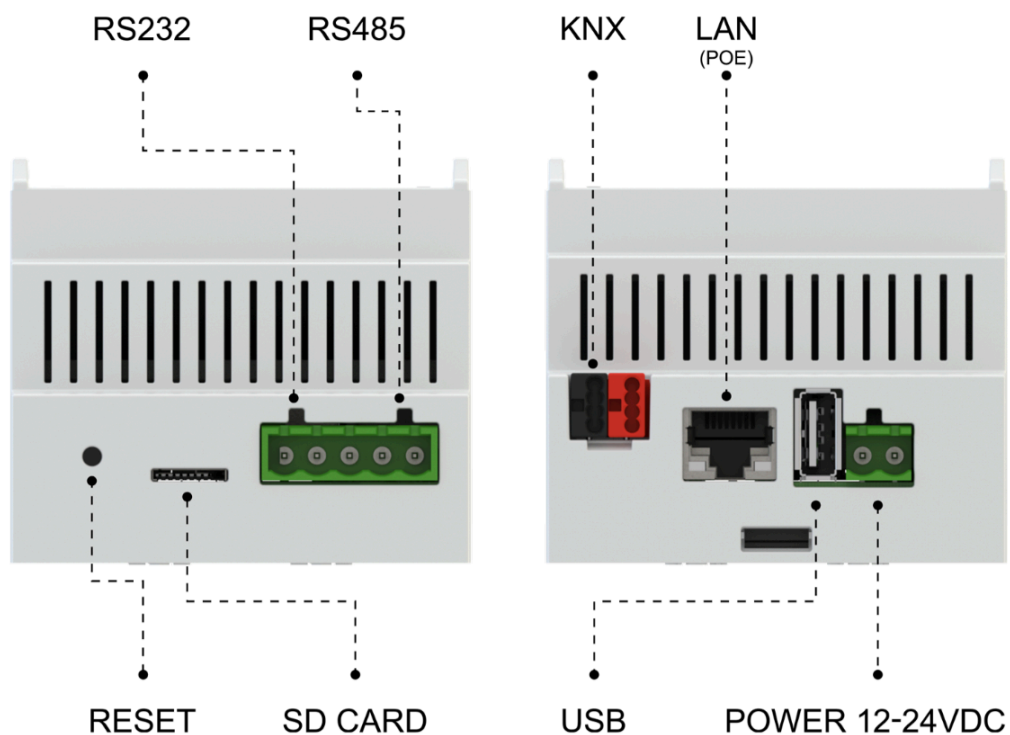


The complete list of systems compatible with DELÉGO SERVER is constantly evolving. For an updated list, consult www.ekinex.com.

3 Preliminary setup

3.1 Overview

DELÉGO SERVER is equipped with 2 status LEDs, terminals for connecting the power supply, the KNX bus line, the Ethernet network, the RS485 bus line and a USB port.



The front panel offers two LED indicators:

- POWER LED: indicates the presence of 12-24 Vdc power at the terminals
- SERVICE LED: normally off, it activates in steady or flashing mode during IP address or factory configuration restoration sequences

The RESET button can be used for recovery operations, as better explained below.

3.2 Connection to the KNX bus

The connection to the KNX system occurs via a common KNX certified cable connected directly to the server via the standard red-black connector supplied.

It is also possible to supervise the KNX system via the network, if an IP router is present; in this case, a physical connection of the server to the bus is not necessary, and a specific communication configuration is required, as illustrated later in this manual. The connection to the KNX bus is not strictly essential for its configuration; However, it is not possible to verify the correctness of the project or simulate the automation functions configured on the server until this connection is established.

3.3 Network connection

The configuration and use of the DELÉGO SERVER requires a connection to the home or company network.

From software version 2.6.0, has been introduced in DELÉGO SERVER a complete support for the DHCP addressing. **The new servers, produced with this preinstalled version, are provided with DHCP as default configuration**; in the previous versions of the servers the IP was statically managed.



Please refer to the instruction sheets inside the packaging, to determine in which of the two conditions your server falls, and follow the corresponding instructions below.

Connect the server to a network with a DHCP server (normally the local networks have it) and perform one of the following actions to discover its IP address:

- If your PC is in the same network, enter the following address in a web browser:

`http://delego.local`

- Search for the DELÉGO SERVER in the list of the DHCP SERVER or by means of an IP scan (or ask to the network administrator)



If more than one server is connected to the same network, it could be reachable at one of the following addresses: **delego.local**, **delego-2.local**, **delego-3.local** etc...

To assign a different IP address to the server, please follow the instruction contained in the SETUP > [LAN NETWORK](#) section below in this manual.



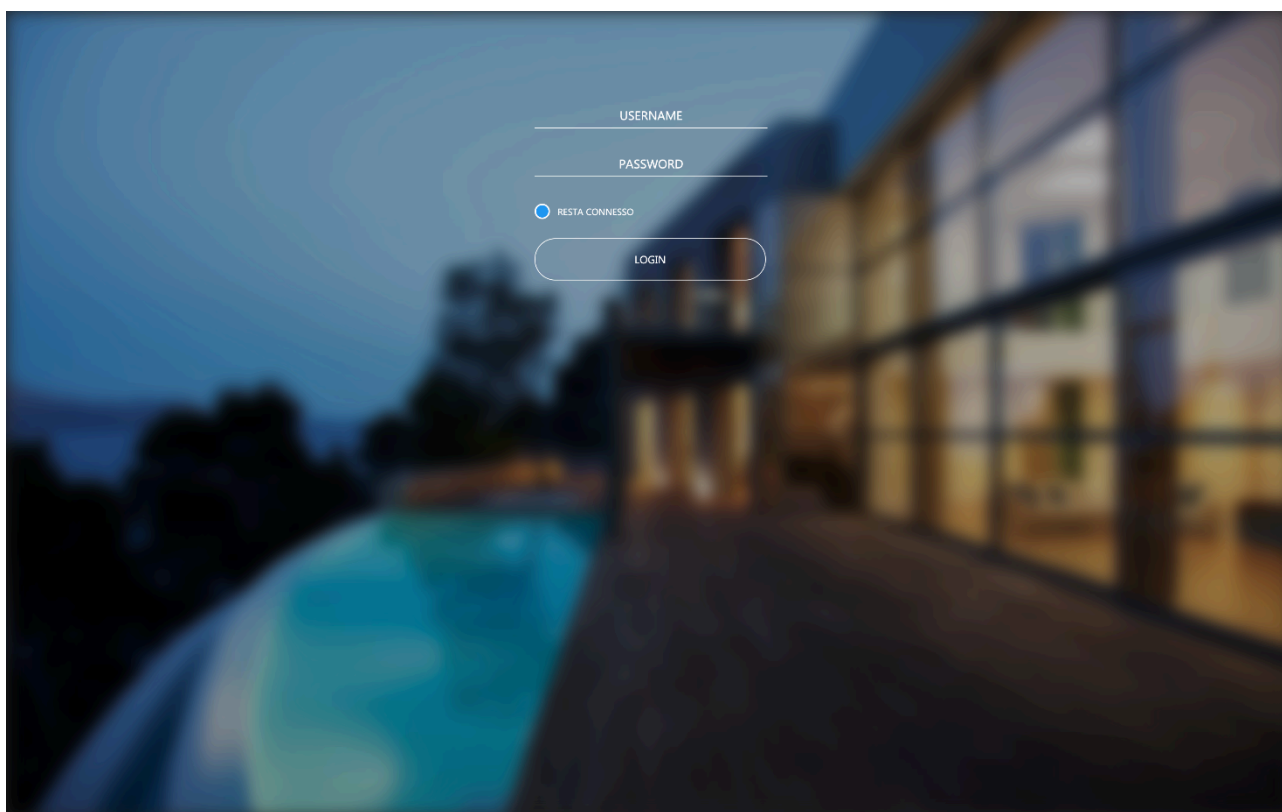
In the past DELÉGO SERVER had a static IP address by default. Please refer to the quick start guide printed in the packaging to identify the address of your unit.

3.4 First access



For an optimal browsing experience, we recommend using the GOOGLE CHROME browser

By opening the browser at the default address as explained in the previous section, the following login screen is displayed:



DELÉGO SERVER has the following pre-set users from factory:

User	Password	Description
admin	admin	Administrator user of the automation system. It has the rights to create users, manage their rights and configure supervision
user	user	Basic user. Has the rights to view the status of the system, navigate the supervision pages and carry out basic commands on the automation system.

Enter the "admin" as USERNAME and PASSWORD and confirm to access the main screen of the software; to access the configuration section, open the side menu and select the CONFIGURATION item.

3.5 Manual IP address restore

If necessary, it is possible to assign the predefined STATIC IP ADDRESS **192.168.0.110** to DELÉGO SERVER using the RESET button:

- Locate the RESET button on the rear side of the device:
- Press the button for at least 10 seconds, until the SERVICE LED on the front of the device starts flashing.
- Within the next 5 seconds, press the button for 1 second and release; within a couple of seconds the front LED lights up steadily for a couple of seconds.
- When the LED turns off, the device is reachable at the factory IP address (192.168.0.110)

If the LED turns off after the first step, repeat the entire procedure. This procedure resets the IP address and maintains all the data relating to the previously carried out configuration of the automation system.



In the old 2-DIN rail module size hardware version, it was necessary to remove the front panel in order to access the reset button.

3.6 Database reset

If the configuration in the database makes it impossible to access the DELÉGO SERVER or its correct use, it is possible to restore the server to the factory conditions (database project) by restoring the empty database with the RESET button.



Starting from software version 2.6.0 the following procedure **does not change the IP address**. In previous versions, the static IP address 192.168.0.100 was also set.

- Locate the RESET button on the rear side of the device
- Press the RESET button for at least 10 seconds, until the SERVICE LED on the front side of the device starts flashing, then release pressure on the button.
- Within the next 5 seconds, press and hold the button for at least 10 seconds.
- When the LED lights up steadily, release the button and wait for it to switch off.
- When the LED turns off, restart the server.
- Wait 1 minute and log in to the server with its last IP address (or the predefined static IP address 192.168.0.110 if the server is equipped with a software version older than 2.6.0).

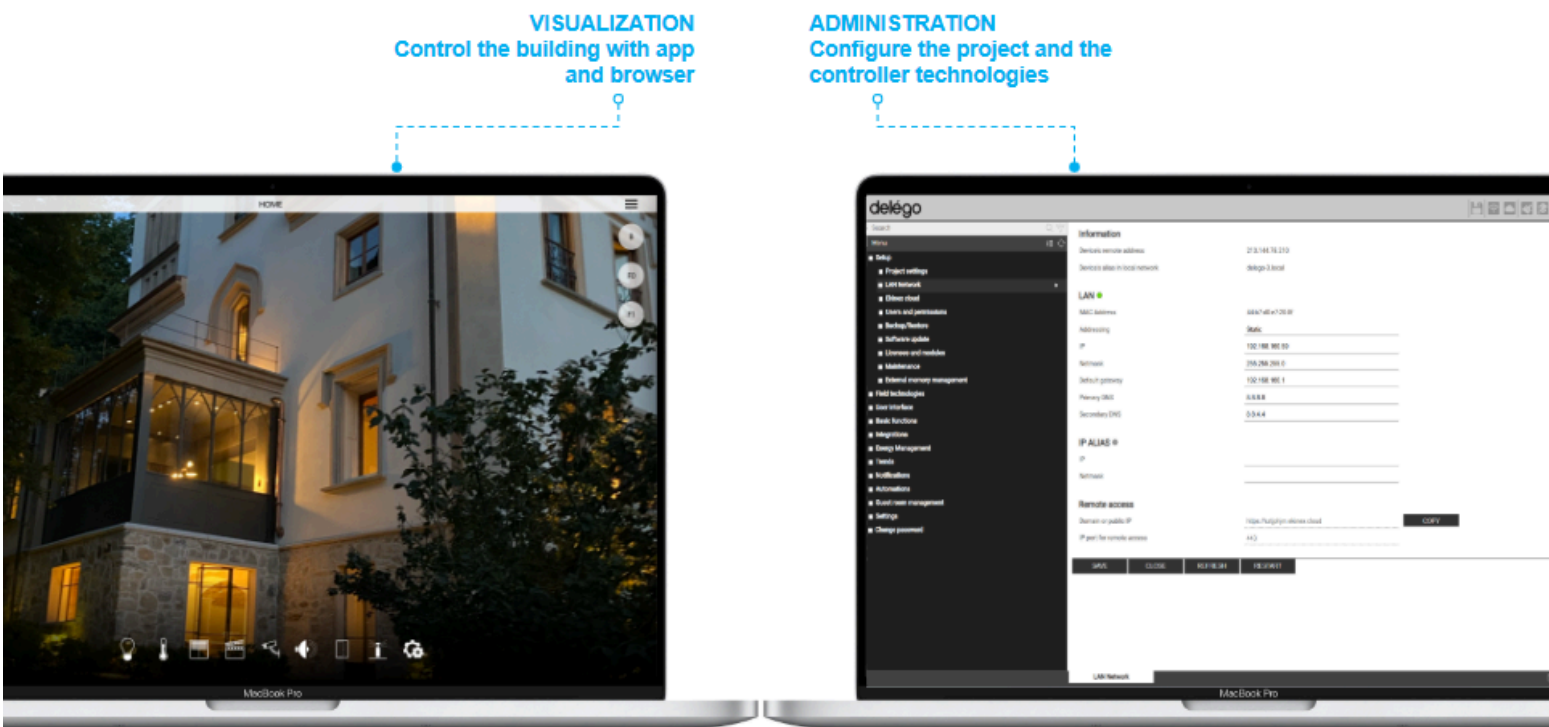


In the old 2-DIN rail module size hardware version, it was necessary to remove the front panel in order to access the reset button.

4 Graphical interface and navigation

4.1 Spaces

DELÉGO SERVER offers two different graphical SPACES, one is the *Visualization*, used by the end user with the app, and the other is the *Administration*, used for the configuration by installers or system integrators:

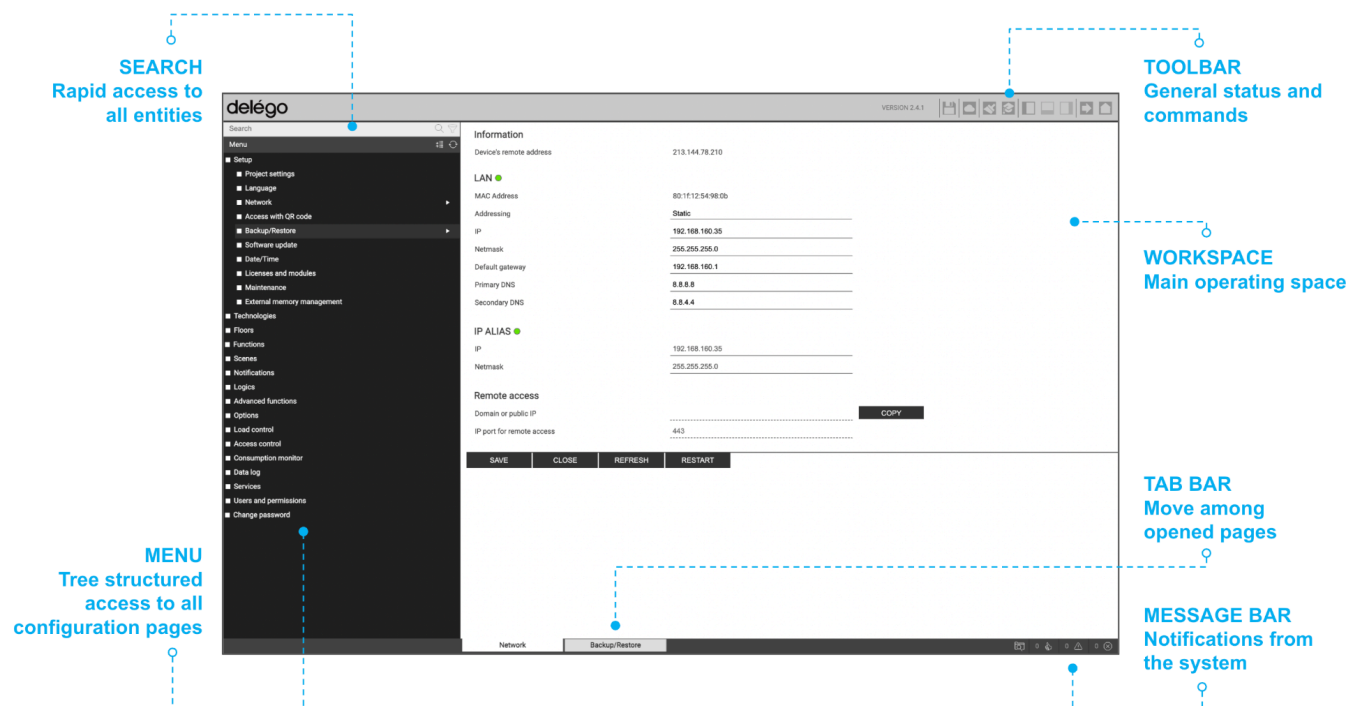


Both the views can be displayed on a web browser, by pointing at the same IP address. The Visualization view can be also used with the DELEGO app on smartphones and tablets.

4.2 Administration view

The Administration View is the space where installers and/or system integrators can configure the Visualization View and all the home automation functions that the server must supervise. It is designed in such a way it can offer a maximum useful space and to reduce the number of operations necessary to configure the system.

In the view are present different elements, positioned in the browser window:

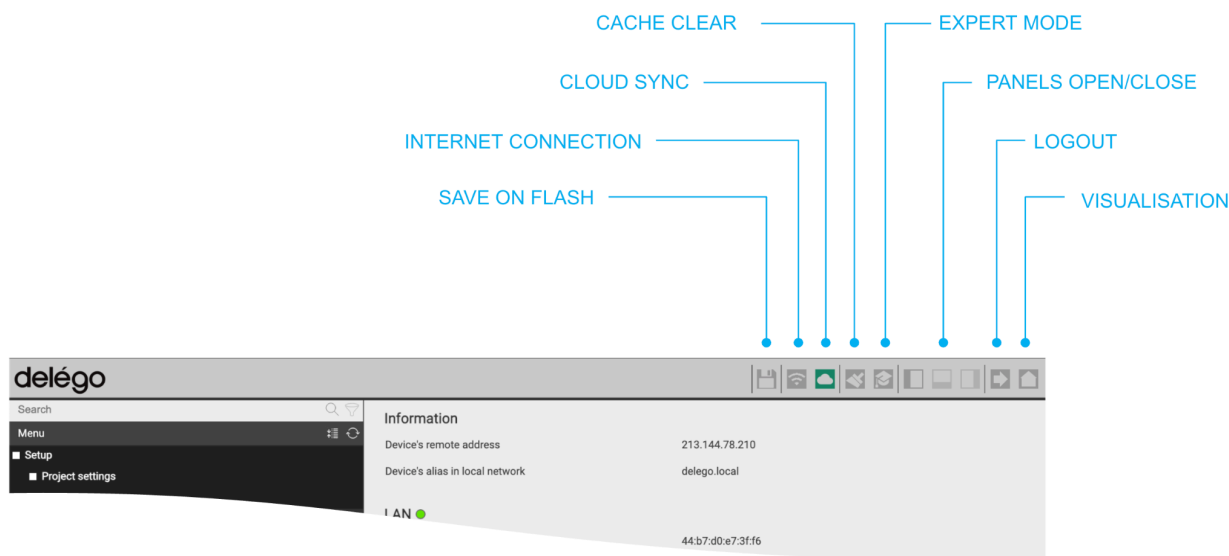


More in details:

SEARCH	It allows you to quickly search for objects based on one or more keywords
MENU	Tree menu offering access to each page or section of the software, as well as creating, modifying or deleting objects
TOOLBAR	It provides a series of buttons to perform the most commonly used operations (e.g., save project, clear cache, enable expert mode, etc)
WORKSPACE	Main section of the page; it hosts object tabs or software configuration pages. It is possible to use multiple tabs at the same time, switching between them through the "TABS" available at the top once at least one page has been opened.
MESSAGE BAR	Contains a summary of all messages automatically generated by DELÉGO SERVER in response to events, alarms or anomalies that have occurred in the home automation system, based on the settings configured by the installer.

4.2.1 Toolbar

The toolbar contains the following buttons:



In details:

	SAVE ON FLASH	The red button means that some changes are still not saved on the persistent flash; an automatic save is performed every 5 minutes, but it can also be performed manually by pressing the button.
	INTERNET CONNECTION	Indicates whether the webserver is connected to the internet or not
	CLOUD SYNC	Indicates if the server is connected to EKINEX's cloud service. If the service is available, it allows you to synchronize supervision objects in such way that can be controlled via remote services, such as voice assistants.
	CLEAR CACHE	Clears the cache memory of the server. Use this button if the view on the screen does not reflect the configurations performed.
	EXPERT MODE	By enabling the EXPERT MODE, a major number of options are displayed (according to the page that you are currently configuring). Usually the expert mode allows a higher degree of function customization.
	PANELS OPEN / CLOSE	They allow you to expand or hide the left (MENU), right (PROPERTIES) and bottom (MESSAGE CENTER) side panels respectively
	LOGOUT	Allows you to close the work session and authenticate with a different user
	VISUALIZATION	It allows you to switch to the Visualization environment for end users and see the result of the configuration performed

4.2.2 Navigation menu

The navigation menu allows you to access all the administrative sections of the web-server and carry out the main operations on the objects. The menu is divided into the following main sections:

SETUP	It allows you to configure the project settings (e.g., language, date time), network setting, log to the Ekinex's cloud, perform backup/restore/update of the server, manage the users, licenses and external memory devices (e.g., USB drive) and perform maintenance operations.
FIELD TECHNOLOGIES	It allows you to configure all the technologies that can be managed by the server, such as KNX, Modbus, Matter, MQTT and MBUS.
USER INTERFACE	It allows you to configure the appearance of the main web page, in particular the background image and the floors and rooms of the building.
BASIC FUNCTION	It allows you to set up scenarios that can be executed during the day or after a trigger. In the menu can also be created virtual objects that can simulate a real home device and can be used in the Delégo project.
INTEGRATION	It allows you to configure Ekinex's or third party devices that can be managed by the server such as security cams, intercoms and audio/video playback devices.
ENERGY MANAGEMENT	It allows you to configure an energy manager that can monitor the energy consumption of the building and display it in the visualization menu by means of a flowchart.
TRENDS	It allows you to configure graphs that can be visualized by the user in the visualization menu; the graphs can plot different types of information, for example the usage of the KNX devices controlled by the server.
NOTIFICATIONS	It allows you to configure all the notifications that can be sent to the final user after an event occurred in the building (e.g., email, push notification on the phone, telegram message).
AUTOMATIONS	It allows you to configure automatic actions that can be executed by the server to simplify the final user experience. An example is the powering on of the lights when the user enters the house.
GUEST ROOM MANAGEMENT	This menu is mainly used for hospitality or offices and allows you to configure all the logics for an access control system.
ADVANCED FUNCTIONS	This menu is visible only if the "expert mode" is enabled and allows you to configure advanced logics that can be used in the automations (e.g., combinatorial operators, math operators, etc).
SETTINGS	It allows you to configure advanced project settings, such as email sending means (cloud or SMTP), customize the graphic library used by the server for icons or buttons and server setting (refresh, inactivity timeout, etc).
CHANGE PASSWORD	It allows you to change the current user's username and password.

The menu has a tree menu structure; at the first access only the first level sections are available, while the lower levels are accessible by expanding the sections that contain them. By clicking on a menu item, it is highlighted in light grey; if the item includes sub-items, they are expanded under the selected item. To close the section, click on it again.

If the selected menu item includes one or more operations, they are shown in the bottom part of the navigation. The possible operations are:

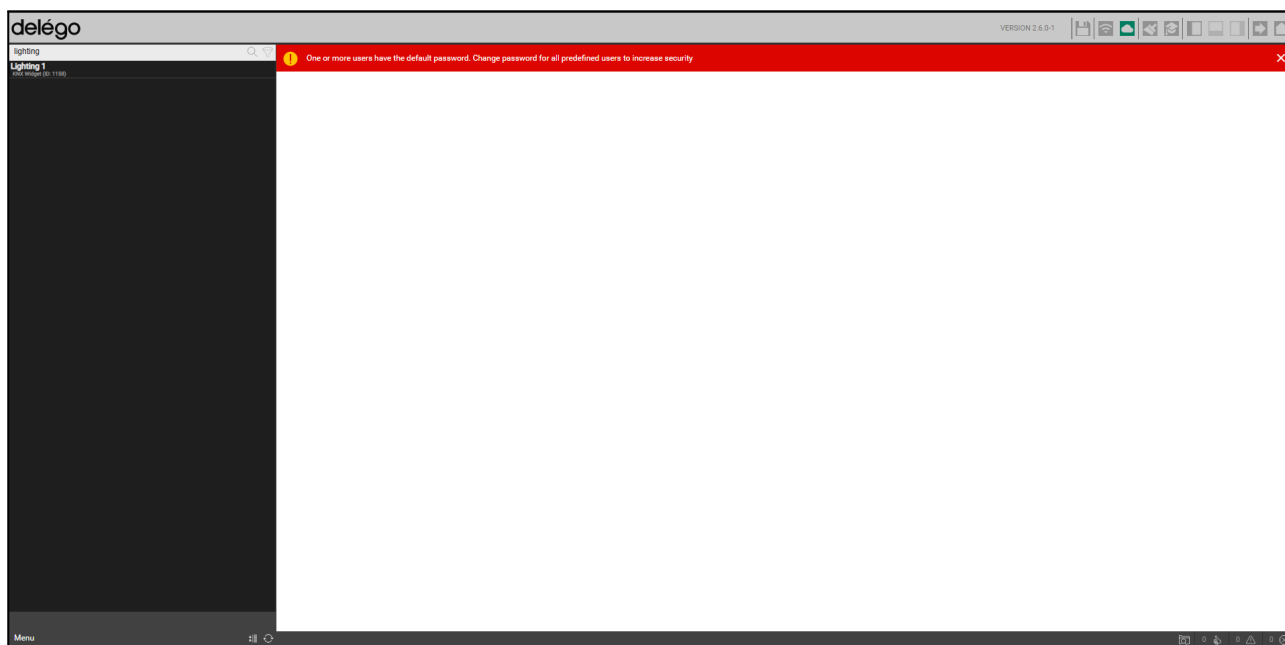
CREATE NEW ()	Allows you to create a new object within the selected section. Depending on the specific section, the creation of specific types of objects is allowed; in the case of more than one type available, a contextual choice menu is shown.
EDIT ()	Allows you to modify the properties of the selected object by opening the relevant tab in the workspace.
REMOVE ()	Allows you to delete the selected item from the project.

If the selected item allows modification the button  is displayed on the right of the item. When an item is open in the workspace, the icon  is displayed on the right side of the item.

Some sections of the menu provide the possibility of creating new objects within them (e.g., Rooms, Floors, etc); when the CREATE NEW button is pressed, a new object is created and automatically selected to be edited; by pressing the “EDIT” button (or the “three dots” next to the item in the menu) you can access its tab to modify its properties.

4.2.3 Search

It is possible to search for an object in the project by typing one or more keywords in the appropriate field at the top left; the results are shown on the left side of the interface, which temporarily occupies the space normally allocated to the navigation menu.



By clicking on a result item, it is highlighted in light grey and, if possible the EDIT and REMOVE options will be available.

The search engine also allows multiple selection by pressing the CTRL key during click selection; in this case, the operations will be performed on all the selected objects.

4.2.4 Workspace

The WORKSPACE represents the main working area of the Administration View. It provides the possibility of operating simultaneously on more than one TAB, or on multiple configuration pages; these pages are opened when you carry out an EDIT operation on an object starting from the MAIN MENU or from the SEARCH MENU.

The open TABs are displayed in the TAB BAR at the bottom of the page; if there is a large number of open TABS, it is possible to access the hidden ones using the appropriate button "Show all"



To close an open TAB, simply click on the close button that is displayed when the mouse cursor is above the tab  **Project settings**. **Note:** if there are unsaved changes, you are asked for confirmation before closing.

4.2.5 Message center

At the bottom of the window is possible to open the console of the event or notifications generated by the system, divided according to their level of severity. By pressing on it, a panel opens containing the details of the most recent notifications, as shown in this example:



Each event has the date and time it occurred. It is possible to clear the notification list or to download the log in a CSV format.

4.3 Visualization view

4.3.1 Navigation

The Visualization view is opened by default on the HOMEPAGE. The page has a background image (that can be customized in the Administration View) and three main sections:



In detail:

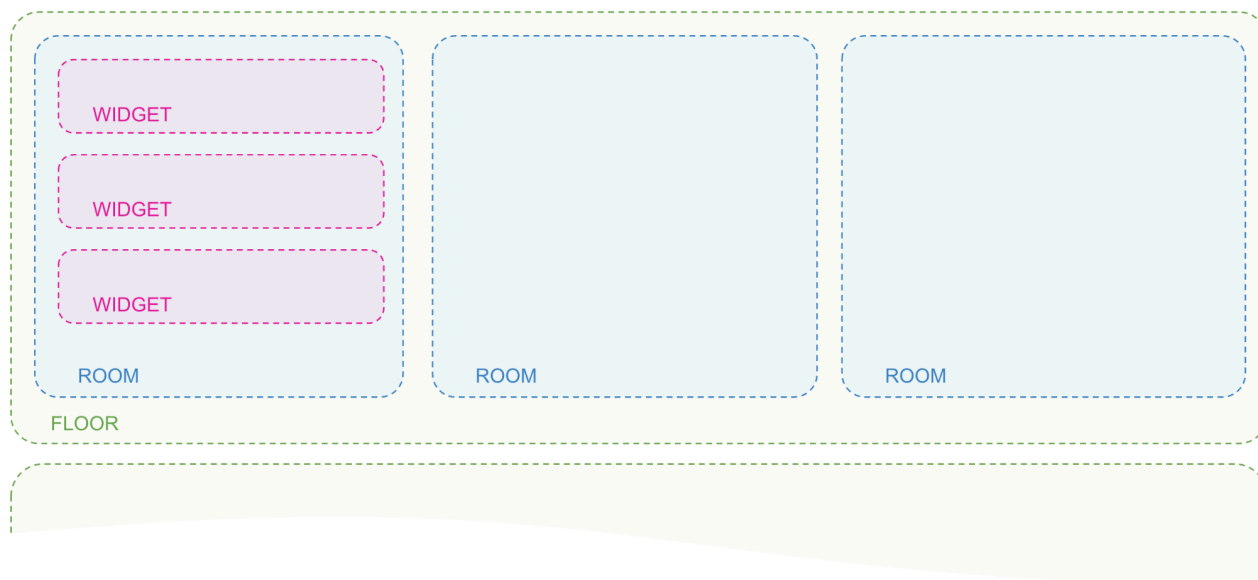
ENVIRONMENTS	In this section are listed the FLOOR(S) of the building and by clicking on the rounded button(s) you can access the ROOM(S) section.
FUNCTIONS	From this toolbar it is possible to access all the WIDGETS (i.e., building functions) of the building. Each icon represents the function available, i.e., light, climate, shadowing, etc.
MENU	In the menu toolbar you can access other specific functions of the system e.g., Guest Room Monitoring System, Energy Manager, Scenarios, etc.

It is always possible to return back to the homepage from a page or popup, by pressing the arrow on the top-left corner of the screen.

4.3.2 Floors and rooms

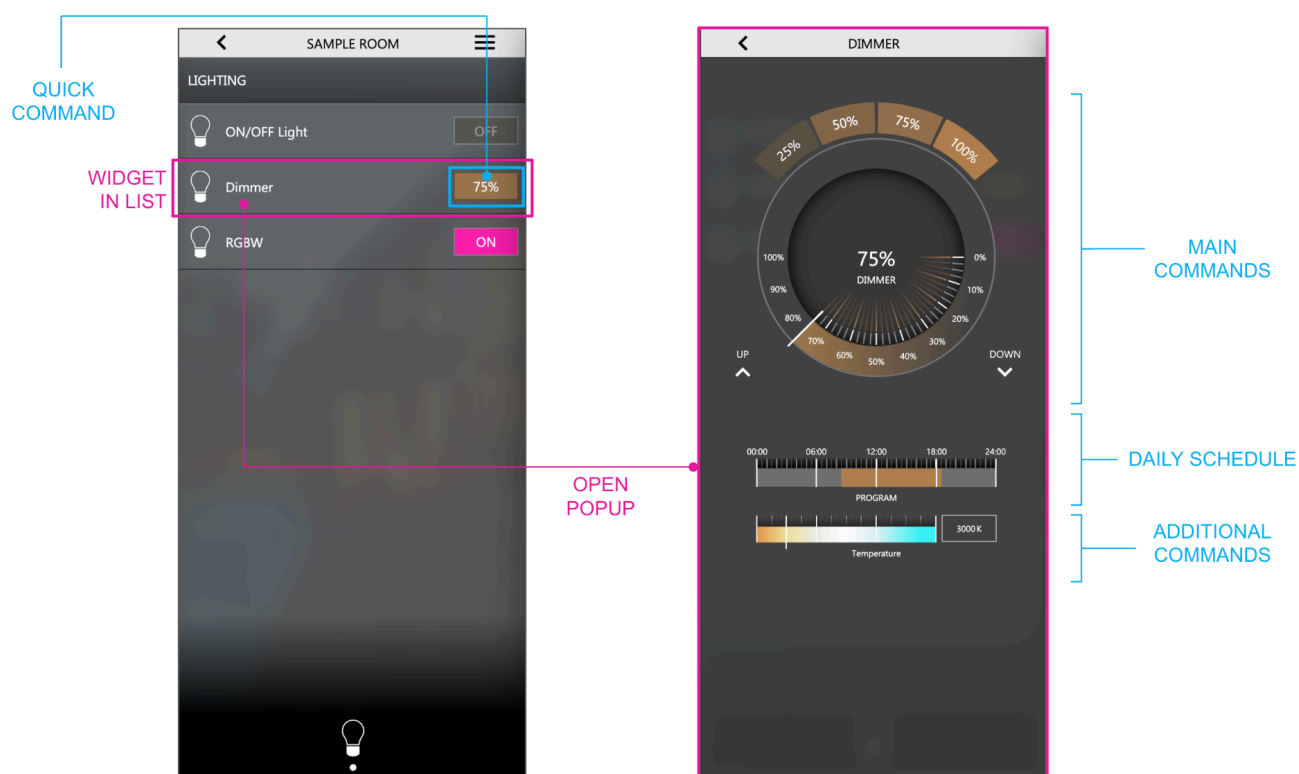
DELÉGO SERVER's navigation is structured on three levels:

- FLOORS: represent a physical floor of the building. It can be seen as a set of ROOMS.
- ROOMS: represent a physical environment in the building. It can be seen as a set of WIDGETS.
- WIDGETS: represent building functions (e.g., light, climate, etc).



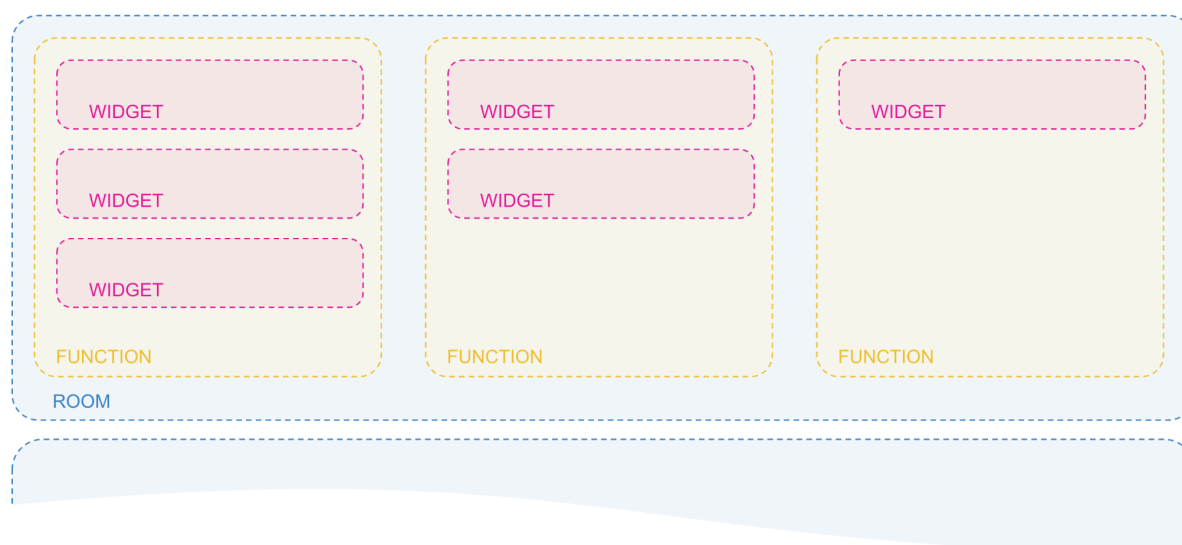
4.3.3 Widgets

The technological functionalities are normally represented in the visualisation as WIDGETS. A WIDGET is a graphical element associated with a specific technology (e.g., KNX, MODBUS etc...) and contains the state or the command of a device of the home system (i.e., light, AC, etc). WIDGETS are represented as "items" inside the ROOMS or in the FUNCTION pages. WIDGETs have a **synthesis of the state**, and offer the possibility to send a **quick command** (e.g., ON/OFF switch command of a light). If supported by the function, is possible to open a popup with all the details and commands by pressing on the **name** or **symbol** on the left of the WIDGET:

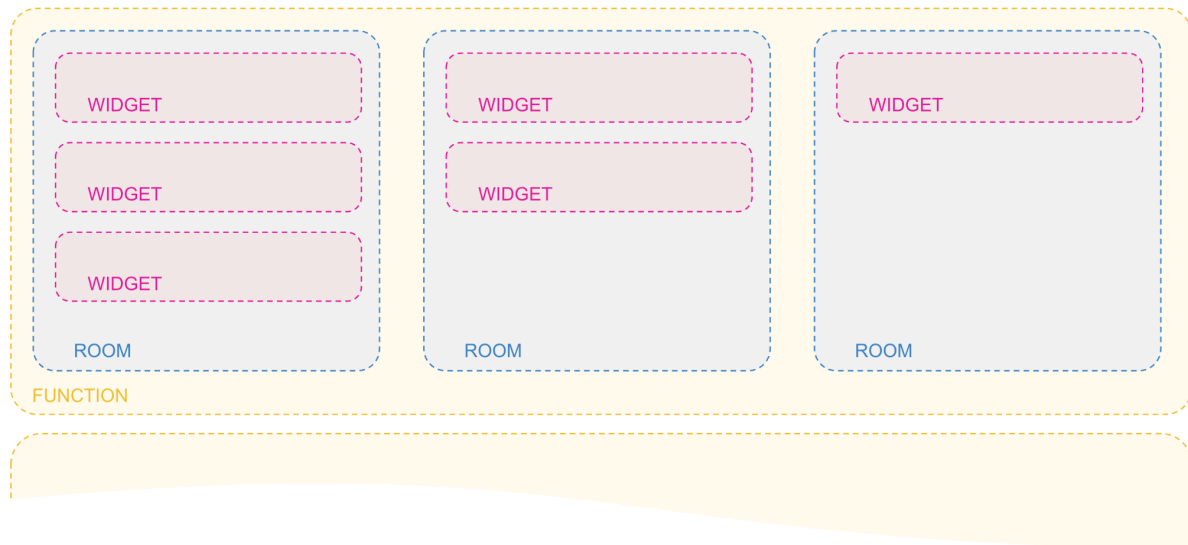


4.3.4 Functions

Each WIDGET belongs to a specific category, called FUNCTION. The FUNCTIONS are used to organize the WIDGETS inside a ROOM; they appear as “blocks” of widgets, and group elements with a similar scope:



It is also possible to see all the WIDGETS of a given FUNCTION, by selecting its symbol in the toolbar in the bottom part of the HOMEPAGE; the items are organized in blocks representing the ROOMS:



4.3.5 Favourites

This page, accessible from the navigation menu in the Visualization, can be filled by the end user with the most frequently used WIDGETS, SCENARIOS or SCHEDULES. To add or remove an element in the FAVOURITES:

- Identify the desired element (e.g., a WIDGET) in a Room.
- Press for 2s the element until a popup is opened.
- When the edit popup is displayed, press the button “ADD TO FAVOURITES”.

To remove an element previously associated with the FAVOURITES page, do the same procedure.

5 Setup

In this chapter is described the “SETUP” section of the Administration tools that allows to configure the main settings of DELÉGO SERVER, for example SW installation, maintenance, project name, language, etc. It is suggested to configure (if needed) and check all the voices in this option page before proceeding with the setup of the Delégo project for the building.

The Setup section contains the following sub-sections: Project settings, LAN Network, Ekinex cloud, Backup/Restore, Software update, Users and permissions, Licenses and modules, Maintenance and External memory management. Some options in the “SETUP” may not be available depending on the user rights or the “Expert Mode” mode.

5.1 Project Settings

The section “Project Settings” contains the following sub-sections: Name and Location, Language, Date/Time, Access with QR Code and Weather service.

5.1.1 Name and Location

In this section is possible to set the following options:

PROJECT NAME	System identification label.
ADDRESS (FOR COORDINATES)	Enter the name of a city or a street address (and press ENTER) to automatically obtain the geographic coordinates (Latitude and Longitude). This option is based on the OpenStreetMap service available from SW version 2.5.1.
LATITUDE LONGITUDE	Geographic coordinates for the integrated astronomical clock. This can be automatically retrieved when entering a valid address.
OFFSET FOR ASTRONOMICAL CLOCK	Possible advance/delay of the astronomical clock with respect to sunrise and sunset times. Positive values (in minutes) widen the "window" with respect to sunrise / sunset (shooting first in the morning and then in the evening), negative values vice versa narrow it.

5.1.2 Language

This page allows you to set the language of the DELÉGO SERVER's Administration View and Visualization View. The supported languages are English, Italian, French and German.

5.1.3 Date/Time

CONFIGURATION OF DATE AND TIME

This section allows you to manually set the system date and time. After entering the information, press the “SAVE” button; a page with a warning message will be displayed.



In some conditions, saving a time different from the one previously set in the web server may result in the display of a “gateway timeout” error page.

In this case, simply reload the page; if the problem persists, turn the web server off and on, wait a minute and restart the device.

TIMEZONE CONFIGURATION

Allows you to establish DELÉGO SERVER’s working time zone.

SYNCHRONIZE DATE/TIME WITH KNX

The section allows you to associate 2 KNX communication objects with the date/time set internally or acquired from an Internet service. Communication objects can be sent on the bus cyclically to synchronize all devices that perform functions associated with a clock.

Configuring this feature requires following the following manual procedure:

1. Close the tab DATE/TIME.
2. Navigate to FIELD TECHNOLOGIES > KNX > KNX WIDGETS > OTHER and create a Single Value component.
3. Enter the detailed page of this component and set as ETS ENCODING a type Date (3 bytes) and associate group address in the field COMMAND and *FEEDBACK*.
4. In the same way, create another Single Value component for the Time by setting as ETS ENCODING a type Time (3 bytes).
5. Press the button *UPDATE* in the single-valued component tab to make the bus communication working with the newly created components.
6. Open the DATE/TIME tab in the work environment: if the setup has been carried out correctly, the group addresses will be automatically associated with the two components created above.

Configuration of date and time

Set time: 08:50

Set date: 23/09/2022

Timezone configuration

Timezone - area: Europe

Timezone - city: Rome

Synchronize date/time to KNX

Time/Date telegram: ☐ Never send out the telegram. ☒ Send out the telegram at system start, whenever changes of time/date occur and also periodically.

Every (Minutes): 30

KNX object Time: Ora - Valore singolo (6/0/1)

KNX object Date: Data - Valore singolo (6/0/0)

Synchronize date/time from

Source type: NTP server

Ntpdate server: pool.ntp.org

Every (Minutes): 20

SAVE CLOSE

Date/Time

SYNCHRONIZE DATE/TIME FROM

This section allows you to automatically update the DELÉGO SERVER's time using an internet service; you need to specify a time server (if different from the default one) and in how many minutes to synchronize.

5.1.4 Access with QR code

It is possible to ease the access to a DELÉGO SERVER from iOS and Android apps by generating a QR code - specific for each user - which contains all the access information; in this way it is not needed to configure the app manually.

At the first access to the web app or when the DELÉGO SERVER's network configuration is changed, you must populate the information requested in the section

SETUP > PROJECT SETTINGS > ACCESS WITH QR CODE

SYSTEM DETAILS

DEFAULT LABEL	Name that will be assigned to the system within the app
---------------	---

LOCAL SETTINGS

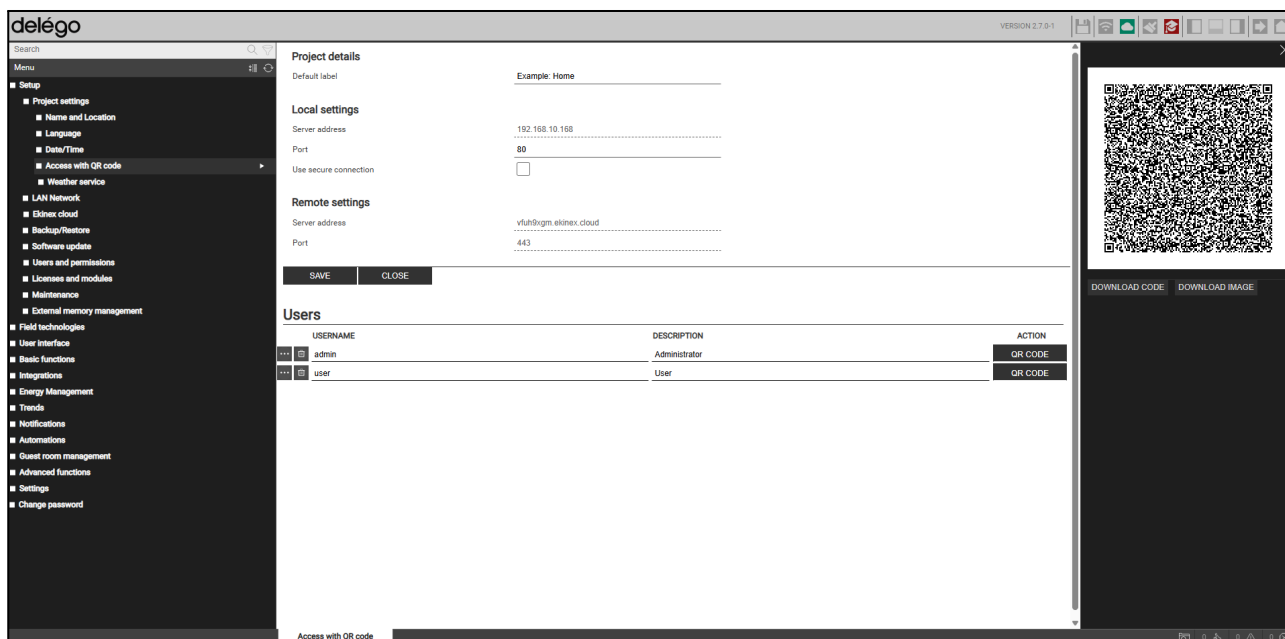
IP ADDRESS	IP address of DELÉGO SERVER in the local network. Starting from version 2.6.0 this field is automatically filled with the actual IP address, and cannot be edited.
PORT	IP port to access to the DELÉGO SERVER If nothing is specified, port 80 will be used for HTTP access, 443 for HTTPS
USE SECURE CONNECTION	Establishes whether the secure HTTPS protocol or (default) HTTP access should be used on the local network

REMOTE SETTINGS

SERVER ADDRESS	Specifies the public IP address or domain name for remote access If on the DELÉGO SERVER the remote control service via cloud is active, this field cannot be modified and it is displayed the public address established by the cloud.
PORT	Specifies the IP port for remote access.

After completing the setup press SAVE.

In the section "Users" are displayed the list of all the users that can access the DELÉGO SERVER. For each user it is possible to generate a unique QR code that contains the information to access to the building project using the DELÉGO app.



Once the DELÉGO app is installed on a smartphone, the user can create a new project using the QR code downloaded or received from the installer.



If you change the DELÉGO SERVER's access information or a user's credential is modified, you must create a new QR code, as the previous code is no longer valid. Within the DELÉGO apps, in any case, it is always possible to manually modify the project parameters automatically generated via QR.

5.1.5 Weather service

By entering the city where the DELÉGO SERVER is located, it is possible to receive information about the current weather conditions and the forecasts for the upcoming days, and use them in the visualisation.

The city must be entered in the following format:

<CITY>, <COUNTRY CODE>

Example:

Rome, IT

When done, press the START button and wait for some seconds; the information regarding the actual weather, and the forecasts, listed in the bottom part of the page, should change from the default ones.

The screenshot shows the delégo web interface. On the left is a navigation menu with categories like Setup, LAN Network, Ekinex cloud, and Field technologies. The 'Weather service' option is selected under Setup. The main area displays 'Object properties' for the weather service, including a 'Communication' section with a 'PLAY' button and a 'City' field set to 'Rome, IT'. Below this is an 'Astronomical clock' section with a table showing weather station data. The 'Data today' section contains a table with various weather metrics and their states.

NAME	STATE
Weather station - Today - Day	Day

NAME	STATE
Weather station - Today - weather conditions	Rain
Weather station - Today - Temperature (°C)	22.1°
Weather station - Today - Min. temperature (°C)	21.3°
Weather station - Today - Max. temperature (°C)	23.9°
Weather station - Today - Temperature (°F)	71.8°
Weather station - Today - Min. temperature (°F)	70.4°
Weather station - Today - Max. temperature (°F)	74.9°
Weather station - Today - Wind alarm	No wind
Weather station - Today - Wind direction	South-West
Weather station - Today - Wind direction	SW

Each weather information listed in this page, can be used as an input for automations, besides the visualisation in the WEATHER section of the navigation menu.



For more details about the weather service configuration refer to [D3]

5.2 LAN Network

This section allows to configure the DELÉGO SERVER network parameters.

In the Information section are listed the following read-only information:

DEVICE'S REMOTE ADDRESS	IP address of the server according to the local network in which the device is installed.
DEVICE'S ALIAS IN LOCAL NETWORK	The alternative name of the server in the local network, useful especially when it is configured in DHCP (automatic addressing). Normally this name is delego.local but, in case of multiple servers in the same network, can be: delego.local, delego-2.local, delego-3.local etc...

To configure a LAN network is needed to enter the following information in the LAN section:

MAC ADDRESS	Unique identifier of the network card (useful for setting any special rules on the internet router).
ADDRESSING	Allows to choose the use of a static or DHCP addressing. It is recommended to use a STATIC IP configuration, especially when other devices (touch panels, video door phones etc...) must interact with the server.
IP	IP Address to be assigned to DELÉGO SERVER when a Static addressing is selected.
NETMASK	Usually set as 255.255.255.0 unless other needs are communicated by the client or network admin.
DEFAULT GATEWAY	Indicate the IP address of the internet router (where present) or of the network reference server, unless other needs are communicated by the client or network admin.

	NOTE: To allow remote access to DELÉGO SERVER it is essential that this parameter is set equal to the network address of the internet router from which you want to access from outside the LAN.
PRIMARY DNS SECONDARY DNS	DNS addresses to allow a DELÉGO to access the internet (if there is a network connection). Contact the network admin or leave the value to the factory settings.

In the IP ALIAS section it is possible to set a second IP address with which DELÉGO SERVER is identified on the network (the LAN network must be appropriately set up for this purpose):

IP	Any additional IP address.
NET MASK	Usually set as 255.255.255.0 unless other needs are communicated by the client or network admin.

In the REMOTE ACCESS section you can specify:

DOMAIN OR PUBLIC IP	Enter here the public IP (if static) or the DYNDNS domain name used to remotely access DELÉGO SERVER. If the remote access using Ekinex's cloud is enabled, this field cannot be modified and it is displayed the public address established by the cloud.
IP PORT FOR REMOTE ACCESS	If to access remotely it is necessary to use a port other than 443 (for specific settings on the router), indicate it in this field

Once the network settings are set, press the "SAVE" button and wait until the network configuration is completed. If you have changed the server's IP address, the page will reload to the new address upon completion. If you also need to change your PC's network connection, reload the page manually.



Check carefully all the information written in the settings before saving, as if they are wrong it may no longer be possible to correctly reach DELÉGO SERVER via your network. In this case, restore to the factory setting the IP address of the server.

When the DELÉGO SERVER is connected to the internet, after saving the network configuration a new SSL certificate is automatically generated, containing the local IP address and - if it has been specified in the "domain or public IP" field - the one for the remote access.

Once the network connections have been configured, an indicator is displayed, indicating the connection status **LAN** .

5.3 Ekinex Cloud

This menu section allows the association of the DELÉGO SERVER to the Ekinex cloud, and the management of the related services. The section contains the following pages:

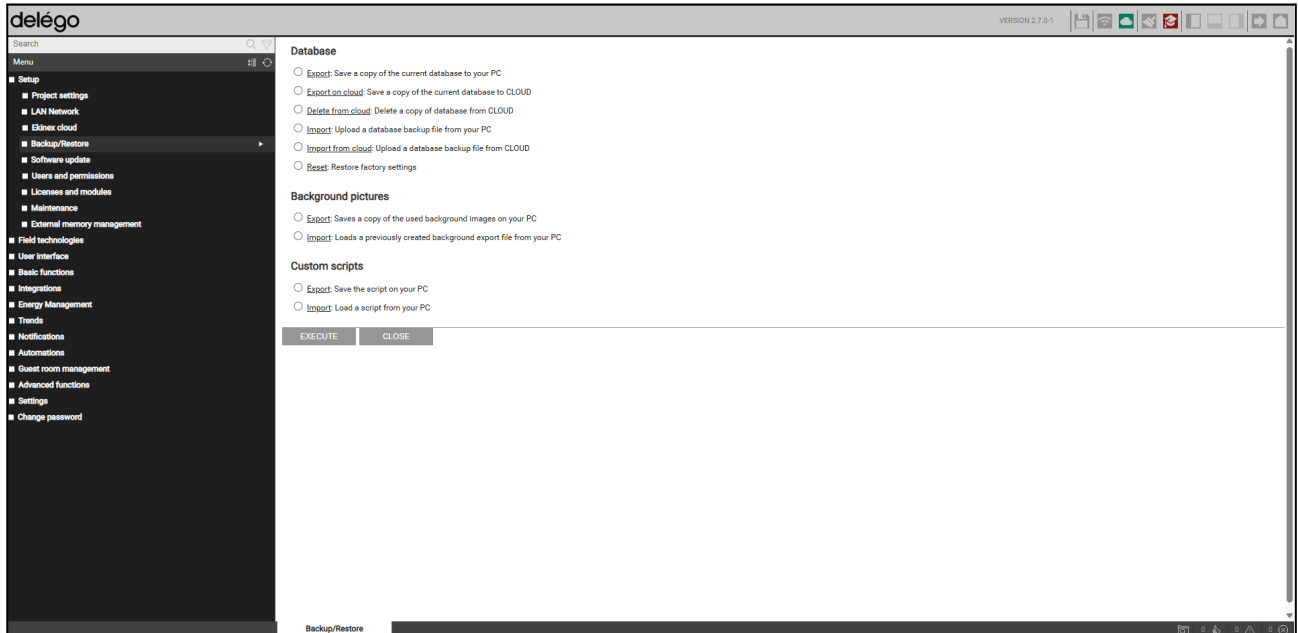
PRODUCT REGISTRATION	Permits the login with the cloud credentials and the binding of the webserver with OWNER or INSTALLER rights. This operation is preparatory to the subsequent ones.
CLOUD SERVICES	Gives an overview of the services based on the Ekinex cloud, which empower the local functionalities. Before using them, the cloud services need to be activated by a valid cloud account.
OBJECTS SYNC	Permits the synchronization of widgets and scenes with the cloud, in order to enable them to be managed with the voice assistants and the quick commands in the DELÉGO app.
VPN	Gives the possibility to have a full access to the home network where the webserver is installed, use it as an interface for the remote commissioning and maintenance of the KNX bus, and eventually access other devices in the same network for their configuration. The desktop version of the DELÉGO app is required to get access to the cloud VPN from a PC or MAC.



For more details about the online services based on the Ekinex cloud, please refer to [D3]

5.4 Backup/Restore

This page allows you to create a backup file of the DELÉGO SERVER's project or, vice versa, to import a backup file; it is also possible to import a project of another DELÉGO SERVER. In this page it is also possible to reset the server to factory settings keeping the same IP address configured in the LAN section.



Once you have chosen the operation you wish to carry out, press the "EXECUTE" button and wait for the end of the operation, notified by a specific message on the screen. **Do not interrupt the procedure by reloading or closing the browser.**

It is also possible to save a backup of all the images used as background or preview of the Visualization view; in this case, use the EXPORT and IMPORT items in the appropriate section.



Starting from version 2.6.0 it is possible to save backups of the server also on the cloud. For more details please refer to [D3]

5.5 Software update

In this section you can update the software of DELÉGO SERVER; **only use official installation packages to avoid possible malfunctions.**

By accessing the update page, the system will check if there is a new version of the software on Ekinex's cloud. If there is a new SW version, by pressing the UPDATE button the system will start the update procedure.

If it is not available an internet connection, it is possible to proceed with the manual update as follows:

- Access the SOFTWARE UPDATE page.
- Press the MANUAL button.
- Request the latest version of the package to Ekinex's technical assistance, and save it on your PC without unzipping it.
- Select the update package using the "BROWSE" button.
- Click on the "UPDATE" button.

For both automatic and manual modes, the update procedure is automatic; wait until the end of the procedure without reloading or closing the browser. The procedure can take several minutes, depending on your software version and configuration. At the end of the installation, a summary of the new software version update is displayed; to complete the procedure, press "RESTART" to reboot the server.

If the update procedure is interrupted due to accidental causes (e.g. power failure, loss of network connection with your PC), try to:

- Restart the server.
- Wait a minute, then open your browser to the IP address of DELÉGO SERVER.
- Wait that the automatic recovery procedure is completed and restart the server again.



The automatic recovery procedure is also started by performing a hard reset from the reset button. If the automatic reset does not unlock (wait at least 15 minutes to be safe), contact EKINEX technical assistance.

5.6 Users and permissions

This chapter illustrates DELÉGO SERVER's user management and how to customize it according to your needs, to guarantee security and differentiated access to the supervision pages.

5.6.1 Users and user groups

Authentication in DELÉGO SERVER is based on two types of users:

- **USERS:** these are the actual supervision access accounts, identified by a "username" and a "password". Users are not holders of permissions and privileges, but can belong to one or more USER GROUPS which determine their level of access to the software
- **USER GROUPS:** they hold access permissions to the different functions of the software. Changing a permission for a group simultaneously affects all users who are part of it.

5.6.2 Creating a new user

To create a new user, like the other types of objects seen previously:

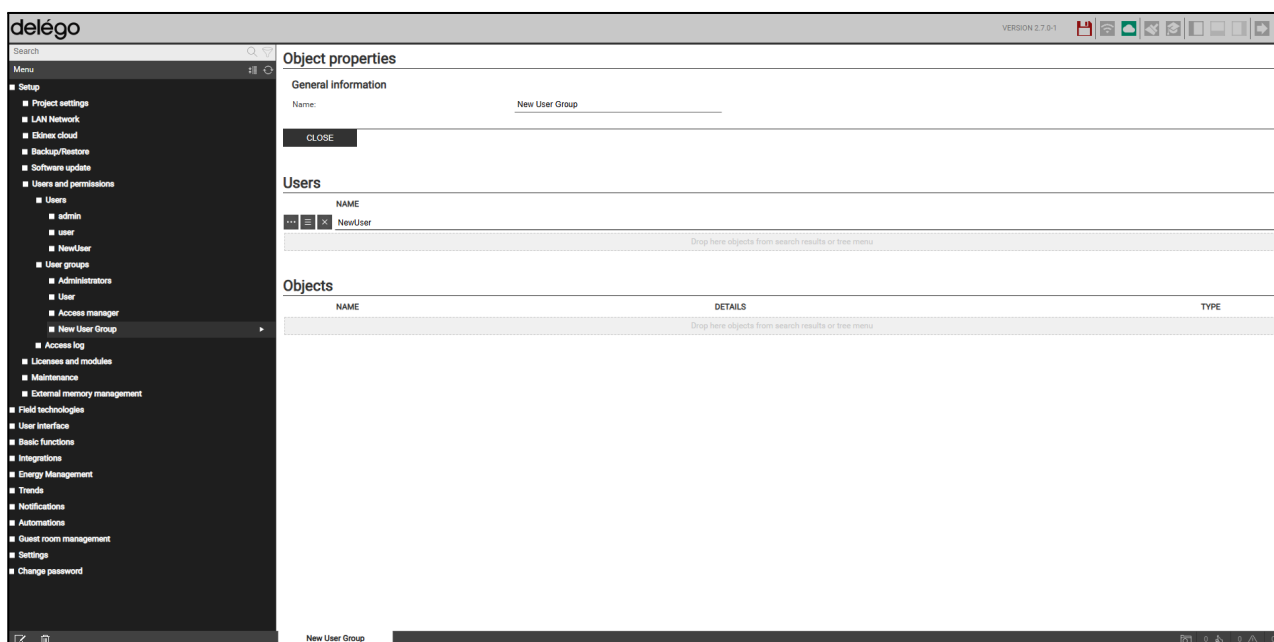
- Access the Administration View of DELÉGO.
- Access the section SETUP > USERS AND PERMISSIONS > USERS.
- Press the "ADD" button and access the tab of the newly created object.

The users tab allows you to set the following properties:

USERNAME	Name used to log in to the system – <u>It must be composed of alphanumeric characters without spaces or special characters</u>
PASSWORD REPEAT PASSWORD	Keyword to access the system – <u>It must be composed of alphanumeric characters without spaces</u>
ASSOCIATED CLOUD USER	If you have logged the cloud with the user and he was associated as <i>owner</i> or <i>installer</i> , the corresponding email is shown in this field (not editable).
CLOUD ACCESS	If selected, it allows the user in question to authenticate with their cloud credentials, as an alternative to local ones.

5.6.3 User groups and access rights

By accessing the tab USER GROUP it is possible to create the type of users that can access to the server (e.g., installers, maintenance, tenants, etc). By default, there are 2 user groups: Users and Administrators. After creating a user like described in the previous section you can allocate a user to a user group by dragging it from the tree menu or from the search engine into the appropriate "USERS" section of the User Group edit page.



It is also possible to assign one or more supervision objects to the USER GROUP, thus making them "private" and accessible only to USERS belonging to the USER GROUP itself: for this purpose, simply drag the desired objects into the "OBJECTS" section.



Once an object has been assigned to a user group, it is no longer possible to use it by users outside the group itself; it is therefore important to pay attention to these operations, to avoid situations in which you are no longer able to use objects or change these settings.

For this purpose, it is recommended to always associate the "private" objects with the ADMINISTRATORS user group (so that "admin" can always operate on them), and possibly - in addition - with the other user groups that you wish to have control over. of those objects.

5.6.4 Exclusively owned objects

An exclusively owned object is an OBJECT that is associated to one or more than one USER GROUPS; only the users that belong to one of this group can visualize and control those kind of objects.

In an example of a building containing an apartment A and apartment B, each user can visualize only the apartment to which is associated.

To obtain this configuration, navigate to SETUP > USER AND PERMISSIONS > USERS section and

- Create an USER A for apartment A.
- Create an USER B for apartment B.

Subsequently in section SETUP > USERS AND PERMISSIONS > USER GROUPS:

- Create a USER GROUP A.
- Create a USER GROUP B.

In USER GROUP A:

- Drag&Drop USER A in the Users section.
- Drag&Drop in the Objects section the FLOOR, the ROOMS and all the objects that the user must visualize.

Perform the same procedure for USER GROUP B.

NOTE: the admin user must **ALWAYS** be part of all the USERS GROUPS..

In section SETUP > USERS AND PERMISSIONS > USER GROUPS > ADMINISTRATORS, Drag&Drop in the Object section all the FLOORS, ROOMS and objects that are present in the building. In this way, the admin will be the owner of all the objects of the plant, while user A and B can see and control only the objects that are assigned to them..

5.6.5 Default passwords

It is of fundamental importance that the default password for all users pre-installed in DELÉGO is changed, in order to make access secure, especially in the presence of a remote connection.



DELÉGO shows an error message when accessing administration if the password has not been changed for at least one of the predefined users.

5.6.6 Password change

Any user, even with basic rights, can change their access password via the "CHANGE PASSWORD" item in the administration menu.

On this page, you can change your username, and enter a new password, which (once entered correctly 2 times) will be immediately operational.

5.6.7 Access log

By accessing SETUP > USERS AND PERMISSIONS > ACCESS LOG section, the details of accesses on DELÉGO are available with also the possibility of inserting a filter for "Date from - to" in order to obtain a more accurate search.

The screenshot displays the 'Access log' section of the DELÉGO SERVER interface. The sidebar menu on the left shows the navigation path: Setup > Users and permissions > Access log. The main content area features a search options bar with 'Data from' and 'to' fields, and buttons for 'REFRESH', 'EXPORT AS CSV', 'CLEAR LOGS', and 'CLOSE'. Below this, a table displays 18 results. The table has columns for DATE, TIME, LEVEL, TYPE, and MESSAGE. The log entries show various system events, including user logins, logouts, and system startups.

DATE	TIME	LEVEL	TYPE	MESSAGE
2025-09-04	12:20	Information	System	The user admin has logged in with IP address 192.168.160.174
2025-09-04	12:20	Information	System	The user admin has logged in with IP address 192.168.160.174
2025-09-04	12:20	Information	System	The user admin has logged off
2025-09-04	11:55	Information	System	The user admin has logged in with IP address 192.168.1.76
2025-09-04	11:33	Information	System	The user admin has logged in with IP address 192.168.1.76
2025-09-04	11:33	Information	System	The user admin has logged off
2025-09-04	09:04	Information	System	The user admin has logged in with IP address 192.168.160.174
2025-09-04	17:41	Information	System	The user admin has logged in with IP address 192.168.1.159
2025-09-03	16:08	Information	System	The user admin has logged in with IP address 192.168.10.204
2025-09-03	11:42	Information	System	The user admin has logged in with IP address 192.168.160.174
2025-09-03	11:42	Information	System	Unauthorized access from IP address 192.168.160.174
2025-09-03	11:42	Information	System	Unauthorized access from IP address 192.168.160.174
2025-09-01	10:20	Information	System	The user admin has logged in with IP address 192.168.160.174
2025-09-01	10:00	Information	System	The user admin has logged in with IP address 192.168.1.83
2001-01-01	01:00	Information	System	The system has been started
2001-01-01	01:00	Information	System	The system has been started
2001-01-01	01:00	Information	System	The system has been started
2001-01-01	01:00	Information	System	The system has been started

5.7 Licenses and modules

Some DELÉGO SERVER functions are linked to an activation code. This page allows you to manage your activation licenses and insert new ones upon a request to EKINEX's customer service.

Once the additional licenses have been entered, paying attention to the correct association with the software module to which they refer, press the SAVE button to make them effective.

5.8 Maintenance

This page allows you to monitor the operating status of the server and to perform some system restore operations.

Panel information	
Serial code	30105404
Hardware code	D9:CA:D4:21:AD:96:F1:52:C9:59:0A:92:B9:39:3F:89
System status	
Time from last start	1 day
Free RAM memory	464 MB
Used RAM memory	335 MB
Log file	DOWNLOAD
SSL certificate	DOWNLOAD
Actions	
Restart communication services	RESTART
Reboot system	RESTART
Regenerate web certificates	REBUILD
Regenerate local contents for mobile apps	REBUILD
CLOSE	

In the Panel information are displayed respectively the Serial number of the server and the hardware code.

In the System status are reported the time from when the server was powered on and the free and used RAM memory. In this section it is also possible to download a log file and the SSL certificate of the server that can be sent to the customer support service in case they are needed.

In the Action section it is possible to perform the following actions:

RESTART COMMUNICATION SERVICES	Forces the restart of communication services that manage the dialogue with technologies and carry out logical operations. Try this operation if you experience problems communicating with the technologies, or if any configuration changes have not been automatically implemented.
REBOOT SYSTEM	Force restart the device without having to manually intervene on the power supply.
REGENERATE WEB CERTIFICATES	It allows you to generate a new personalized SSL certificate, an operation necessary to secure communication and eliminate browser security warnings. <i>Note: Requires internet access.</i>
REGENERATE LOCAL CONTENT FOR MOBILE DEVICES	Allows you to regenerate the <i>suite software</i> which is downloaded from the iOS and Android apps upon first connection, in order to reduce subsequent data transfers, and therefore make access and navigation much faster. Under normal conditions, this suite is generated with each software update. In particular situations, however, it may be necessary to regenerate this archive; in this specific case, once the operation has

been carried out, a REFRESH of the project in the apps must be done.

5.9 External memory management

In this page you can configure the external memory (USB or SD card) connected to the server, if any. External memories can be used to save logs that are registered at server's runtime or to save the telegram traffic recorded when the function KNX telegram recorder (refer to [D4]) is enabled.

When you connect an external memory to the server you need to reboot the DELÉGO SERVER before the device can be read then select from the option Type which type of external device is connected, if USB or SD (in the given example, the server was connected to an SD card):

External memory

Type

SD

SD memory information

Inserted memory

Yes

Activated memory

Yes

Size

3.7G

Used space

1.7M (1%)

Free space

3.7G

Write enable

Yes

DEACTIVATE

Log reporting

Enable backup of tracked data

☐

View saved data

Press on the day to download the file with the corresponding data.

The days for which data are available are highlighted in the calendar.

<

September

2025

>

Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

DOWNLOAD WEEK

01-31

DOWNLOAD MONTH

DOWNLOAD YEAR

CLOSE

External memory management

6 User Interface

After the main setup described in the previous section, you can start to configure the user interface, i.e., floors and rooms, accessible functions, homepage and the menu voices present in the Visualization View of the web app or the mobile app of DELÉGO SERVER.

6.1 Floors/Rooms

By default, DELÉGO SERVER already has a FLOOR that contains 12 ROOMS. It is possible to edit this floor and rooms or you can create new floors with new rooms, by selecting the “Floors/Rooms” item of the administration menu (USER INTERFACE > FLOORS/ROOMS), and pressing the [+] button on the bottom toolbar. Each floor has the following attributes:

NAME	Label used to represent the FLOOR
VIEW	This option determines the appearance of the button in the HOMEPAGE that represents the FLOOR. You can choose between: • Text label: a short abbreviation (up to 3 chars) of the name • Icon: a graphical symbol (that can be selected in a predefined library or customized with a personal icon)
SHORT NAME/ICON	If in the View option you selected a text label you can write a string of 3 letters that represent the abbreviation of the name of the room (e.g., FL1 > Floor 1, GRF -> Ground Floor). If you select an icon, you can choose, by means of a popup, an icon that represents the floor (e.g., an icon with the number 1 to represent Floor 1 or an icon with a car to represent the Garage). You can also import a personal .jpg or .svg picture to use as an icon. NOTE: the file name <u>must</u> respect the following format: ico_environment_xxxxxxxxxx

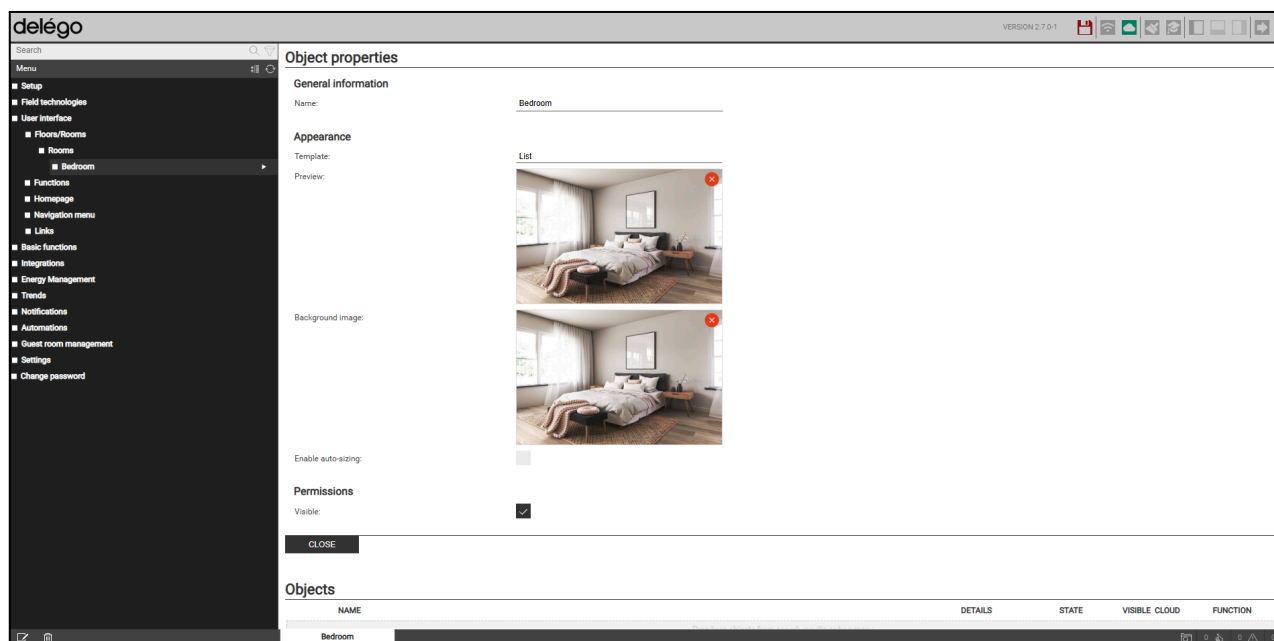
By opening the section:

USER INTERFAFACE > FLOORS/ROOMS > FLOOR_NAME

You can access the list of rooms of the floor, which allows you to enter the edit page of each present room environment, or to create new ones by pressing the Add button. It is also possible:

- To access the room edit page
- Change the sorting of the rooms on the floor.
- Delete a room.
- Enable or disable the visibility of a room in the Visualization View.

The appearance of the edit page of the room is depicted in the following image:



The user can configure the following options:

NAME	The room name.
GRAPHIC TEMPLATE	With this option the user can choose the graphic layout of the room's objects (i.e., widgets): • LIST: the objects are listed sequentially by function (i.e., light, climate, etc). • MAP: if selecting as a background image a map of the room or floor, you can arrange the widgets above the map, simulating the real location of the home automation devices.
PREVIEW	Allows to select or upload from the PC an image which will be used to identify the room in the Visualization View.
BACKGROUND IMAGE	Allows you to select or upload from the PC an image which will be used as the background image of the room in the Visualization View.
ENABLE AUTO-SIZING	If as graphic template you select the map, if this option is enabled the system will adapt the size of the background image to the size of the screen, applying a "zoom" factor within the limits established in the section SETTINGS > MAP VIEW SETTINGS Otherwise, the original size is maintained, centered on the screen.
VISIBLE	Enables or disables the visibility of the room in the Visualization View.



It is suggested to import images in .jpg or .png format with a maximum resolution of 1024 x 768.

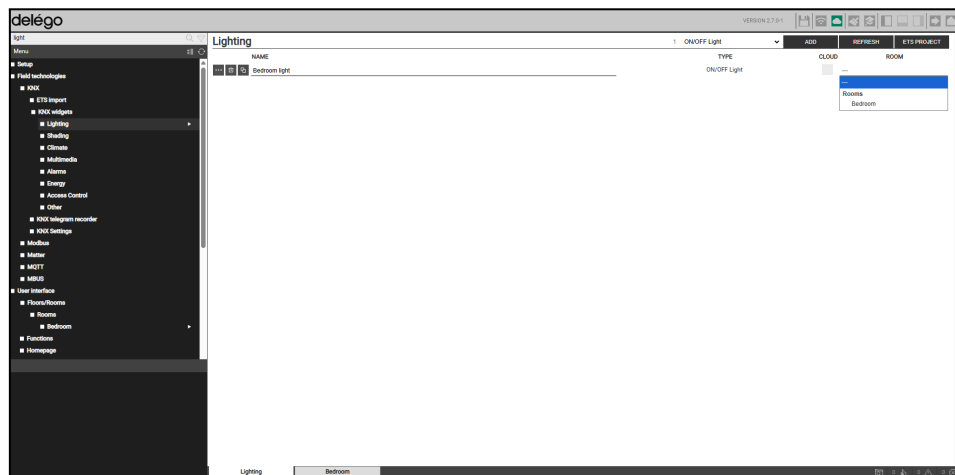


Starting from software version 2.7.0, rooms and floors can be automatically created when importing a .knxproj ETS project. Refer to [D4].

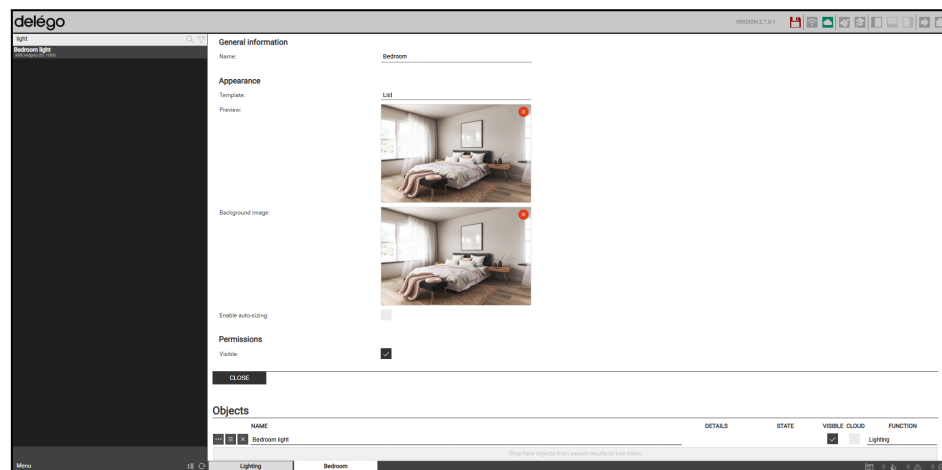
6.2 Widgets association

After creating and configuring a Room, it is possible to associate one or more WIDGETS or other graphical entities to a room. There are two methods:

- In the details page of the WIDGET, select the ROOM to which is needed to associate the widget from the drop-down-menu.



- In the edit page of the room you can drag and drop in the section OBJECTS the WIDGET. NOTE: it is necessary to use the SEARCH menu to identify the widget.



It is possible to change the order of the graphic components using the SORT button ; this determines the order in which elements are displayed in the Visualization View.

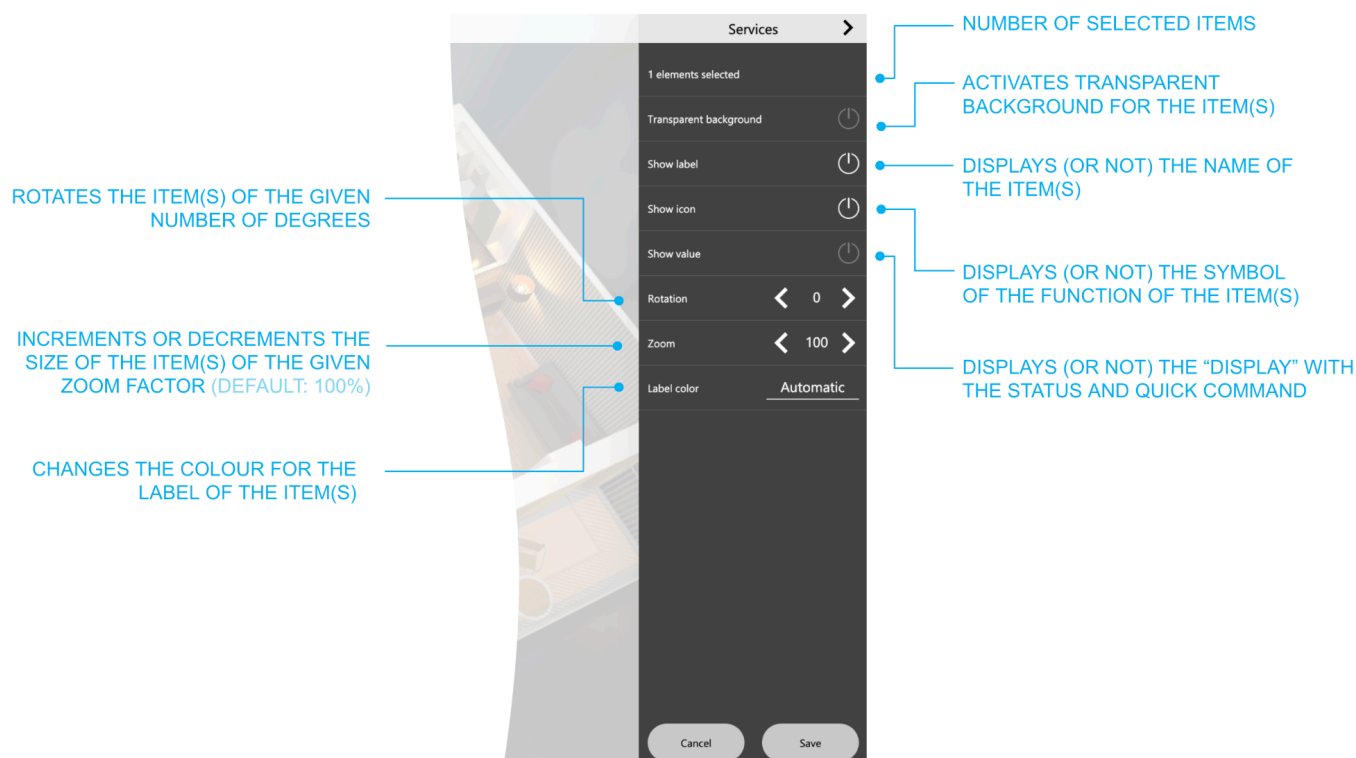
6.3 Map customization

The customization of a room using a graphic map can be performed from the Visualization View with the EDIT MAP item of the navigation menu. Only the users with administration rights can access this section. In this menu it is possible:

- To drag the objects to the desired position in the map (NOTE: by default they are all overlapped at the top left and displayed as black squares).
- To customize the appearance of each object.

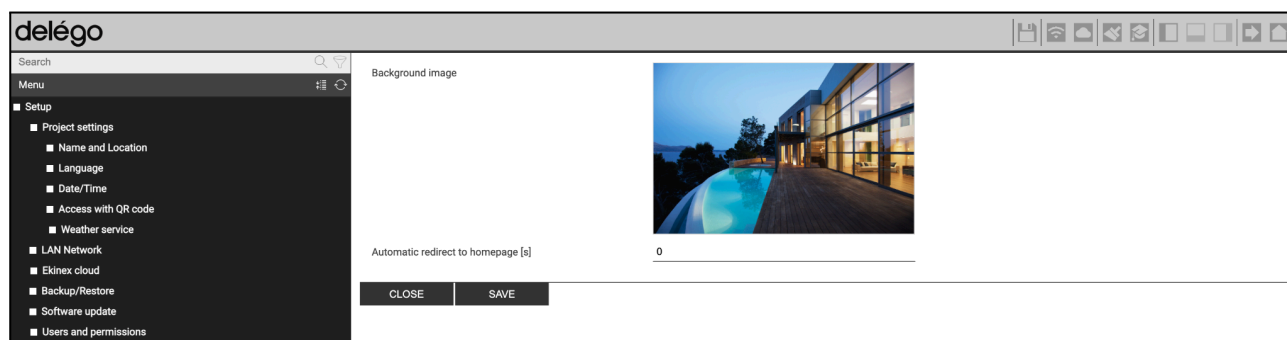


The following picture shows the options available in the EDIT MAP menu:



6.4 Homepage

In this page it is possible to customize the homepage background, by using one of the available pictures or uploading a new one (e.g., the picture of the building you are configuring).



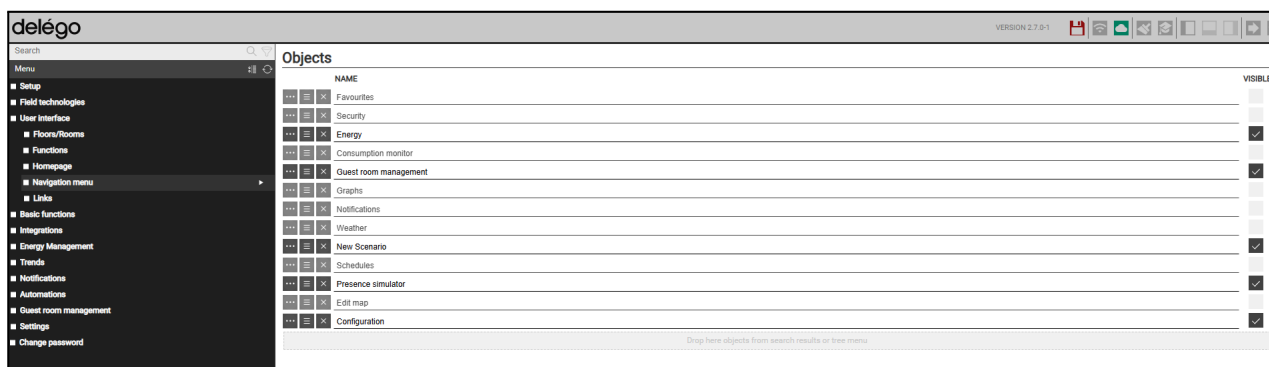
It is also possible to set a timeout for which the system will return to the homepage after a determined period of time in seconds.



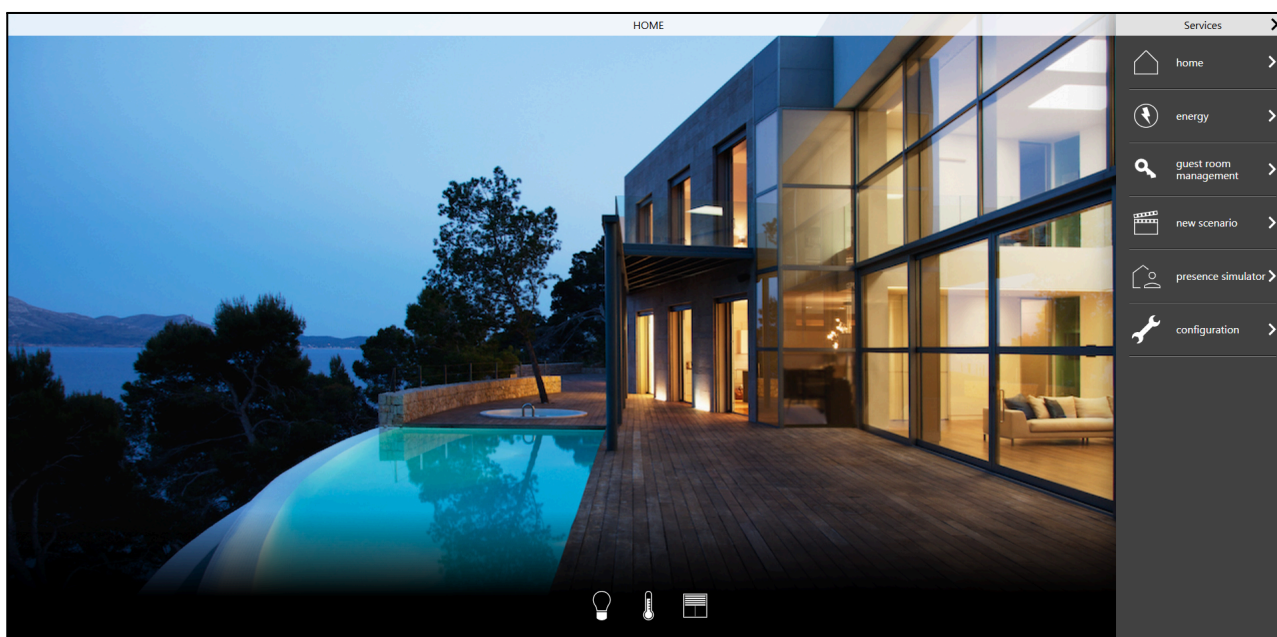
In software versions before the 2.7.0 this item was located in another section of the administration menu.

6.5 Navigation menu

in this page you can enable or disable the entries that are listed in the lateral navigation menu of the visualization, according to the customer's needs; for example, for a hospitality building you could select only the following entries:



In such way that the navigation menu of the Visualization View displays only the pages that are needed by an hotel manager:



It is suggested keeping the Configuration item always enabled.

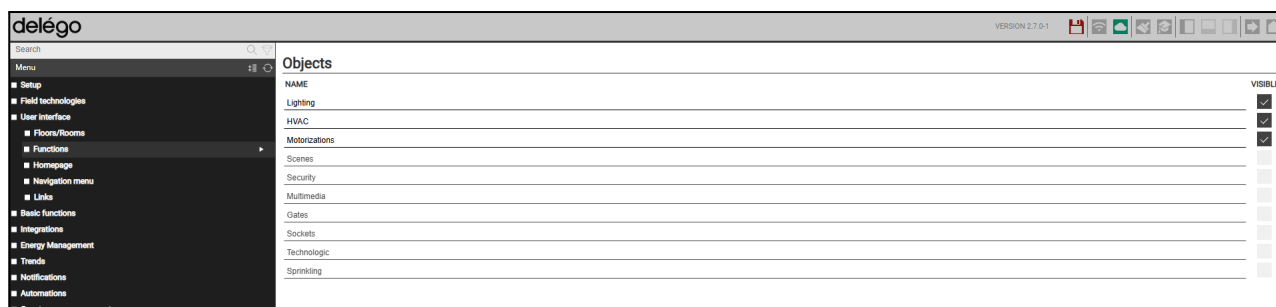


In software versions before the 2.7.0 this item was located in another section of the administration menu.

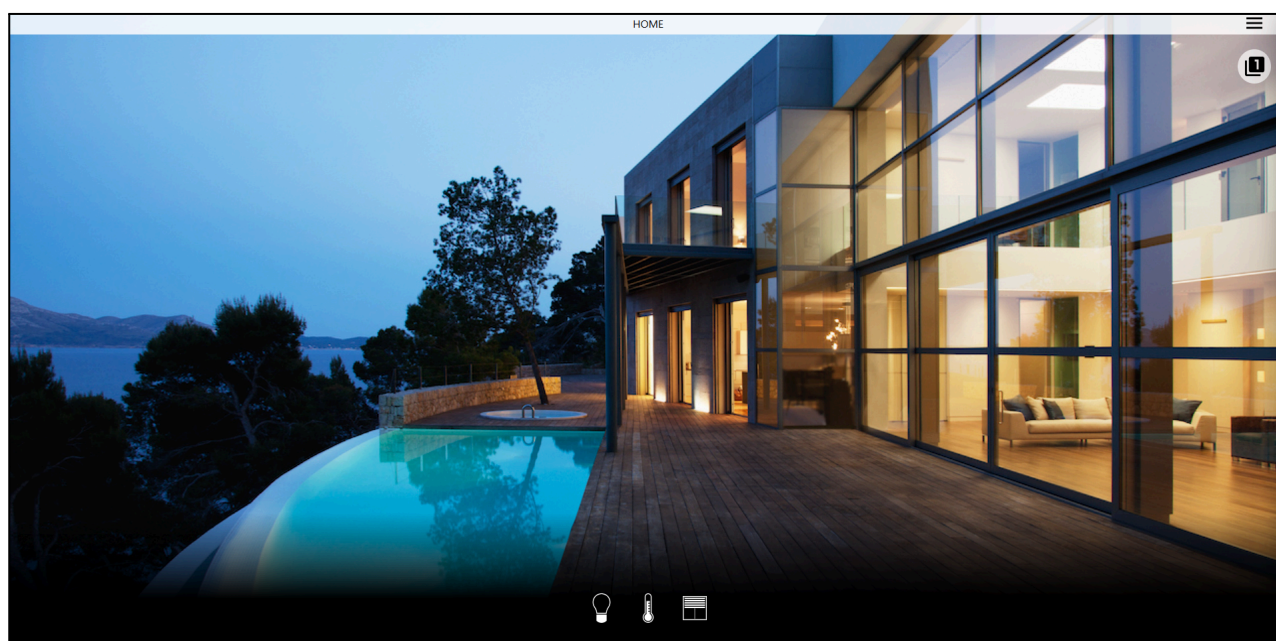
6.6 Functions

In this page you can enable or disable the visibility of the utilities of a home automation system, according to the customer needs.

By default all the functions are selected but, for example, if a customer's installation only includes a lighting, climate and motorization system, you can select only the needed functions as shown in the picture:



In this case, the toolbar in the bottom part of the homepage will contain a lower number of symbols:



In software versions before the 2.7.0 this item was located in another section of the administration menu.

6.7 Links

In this section it is possible to configure hyperlinks that can be inserted in a room and can be used to connect an entity to:

- Another room.
- An external URL.
- A third party app (only on DELÉGO mobile app), like for example Google Maps.



In software versions before the 2.7.0 this item was located in another section of the administration menu.

To create a new link, select the menu section

USER INTERFACE > LINKS

and press the [+] button. Open the edit page and fill the following options:

NAME	Name of the link that will be displayed in the Visualization View.
ROOM	The room where the link must be inserted.
FUNCTION	The category (i.e., lighting, climate, motorization) where the link will be displayed.
LINK TYPE	Select the link type: URL, other room or App.
OPEN LINK IN A NEW TAB	If the type of link is URL, enable this option if the URL must be opened in a new browser tab. If not selected the URL will be opened in a popup of the Visualization View.
DESTINATION	The destination of the link, according to its type: • The URL of the web page. • The room. • The app to be opened.

6.7.1 Opening third-party apps

When selecting “APP” in the link type, it is requested to enter the following information:

PREDEFINED APP	Select one of the available apps from the drop-down menu; leave empty to enter it manually. Note: some apps are available only on the Android operating system.
ANDROID APP REFERENCE	Enter the app reference, i.e., the URL address of the app on Google Store
IOS APP REFERENCE	Enter the so-called “app schema” to open the app. This information must be provided by the app developer, or retrieved with a search on the internet.

6.7.2 Adding links to the navigation menu

It is possible to add a link to the Visualization View navigation menu, by opening the section of the Administration View USER INTERFACE > NAVIGATION MENU and dropping the link into the list of items in the menu. You can also decide the order of the link.

7 Schedules

7.1 Configuration

Any WIDGET or graphical entity visible in the Visualization View can be scheduled, in order to make DELÉGO SERVER send commands at a certain day time. The schedulers are managed by the end user, directly in the Visualisation View

When the user creates a schedule for a WIDGET, the scheduler is applied on the sub-item of the widget that has the SCHED flag enabled. The SCHED flag can be changed in the edit page of the WIDGET activating the EXPERT mode . Objects that do not have sub-items (e.g. SCENES) can be directly scheduled.

7.2 Active schedules visualisation

Before illustrating how to change or create new schedules, it is important to know how to see the active schedules already present in the project. There are three different methods.

7.2.1 Schedules overview

Press the SCHEDULES item in the navigation menu to open the following page:



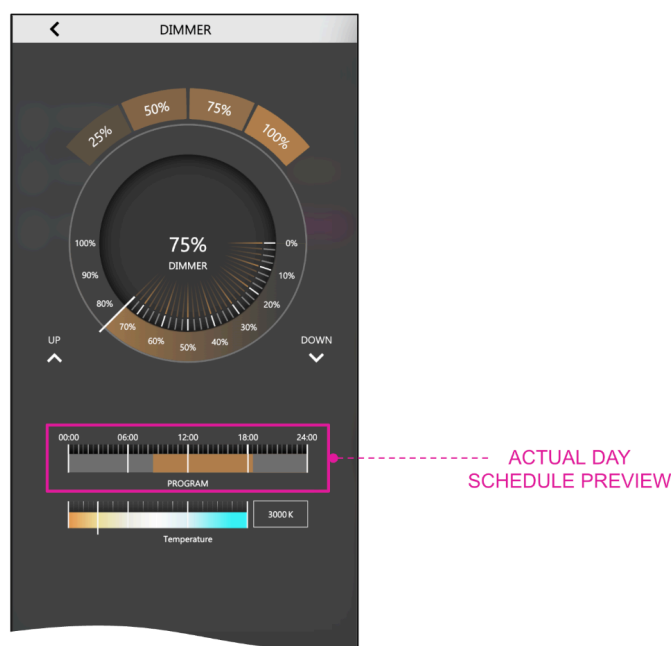
This page contains all the active schedules in the project, organized by FUNCTION. The following buttons are available in the bottom part of the screen:

TODAY VIEW	Shows the schedules active in the same day Takes in consideration eventual exceptions for the actual date.
WEEKDAY SELECTION	Allows to select a different weekday and see the schedules for that day
ADD NEW SCHEDULE	Opens a dialog window, where all the WIDGETS, SCENES and other entities are listed (organized in their belonging FUNCTION) and can be selected, to create a schedule on it

By pressing on a schedule preview, it is possible to change it, as explained in the next paragraphs.

7.2.2 Preview in widgets popup

The widgets that have a details popup, give a preview of the schedule for the actual day (if present) under the main controls, like in the following example:



7.2.3 Context edit menu

By keeping pressed for at least 2s any item in the Visualisation View, an edit popup is displayed, giving the possibility to:

- Change its name.
- Add or remove it from the FAVOURITES.
- **Create or change its schedule(s).**

7.3 Daily profiles

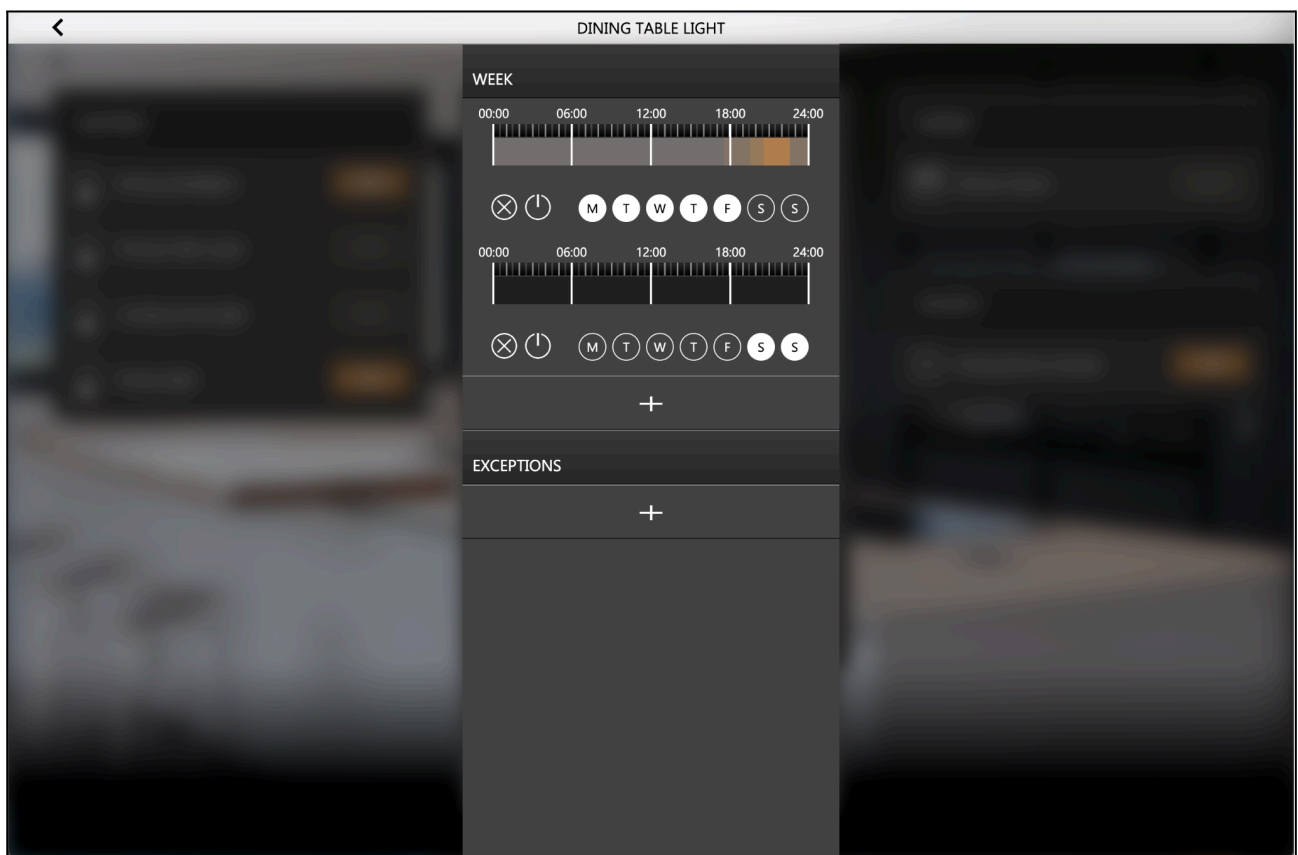
A schedule is made by one or more DAILY PROFILEs, which are a list of actions to be executed within the 24 hours of the day. The daily profiles can be of two types:

- WEEK: associated to one or more weekday
- EXCEPTIONS: associated to one or more specific day(s) along the year

When opening an empty schedule, it is possible to add one or more profiles of the two types, by pressing the corresponding [+] button.

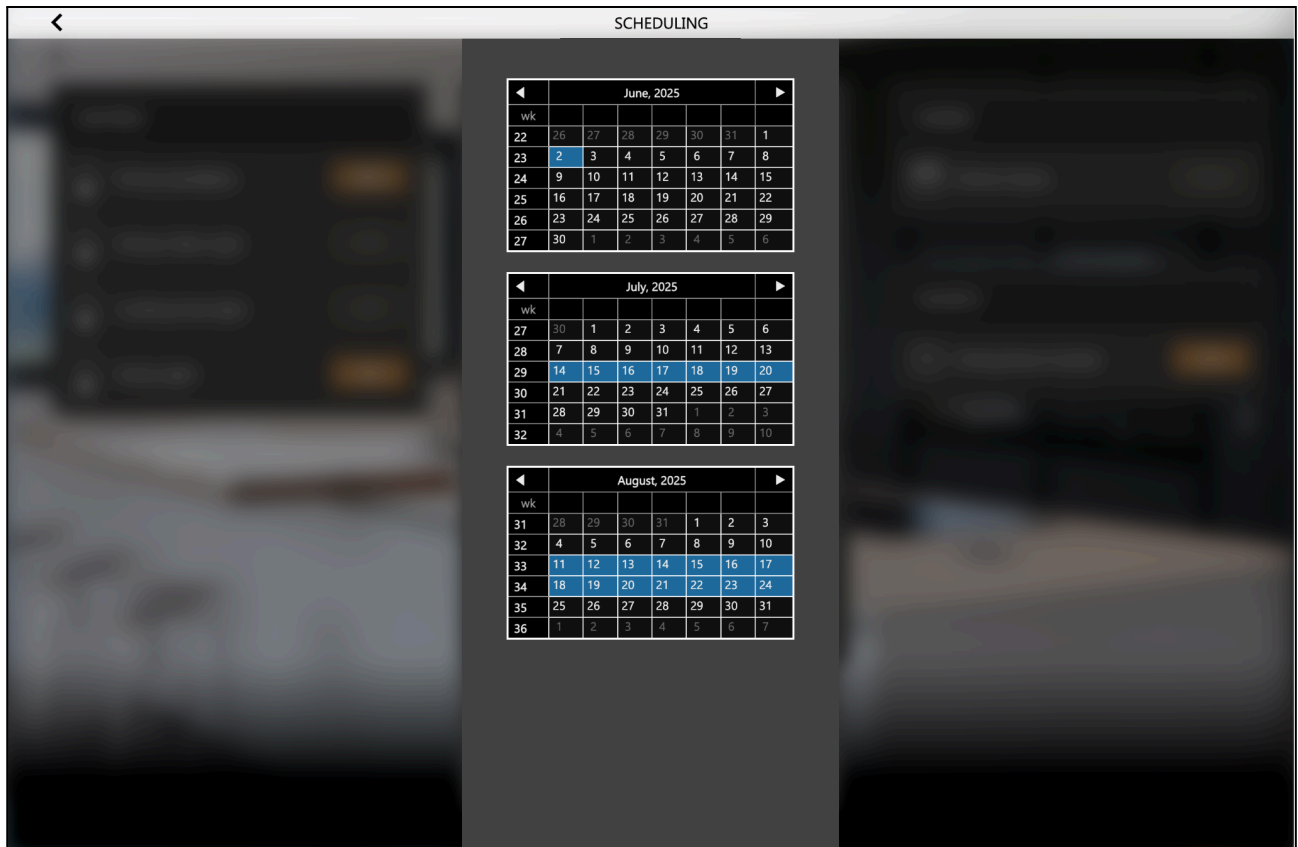
7.3.1 Weekly profiles

Adding a weekly profile, it is requested to associate it with one or more weekdays; this can be done by simply press the corresponding symbol (that becomes white, indicating that the profile is active on that weekday):



7.3.2 Exceptions

Adding an exception, as opposite, asks for the selection of one or more days in the calendar (by pressing or the “---” indicator), like in the following example:



In order to save the selection of the date(s), press the “back” button on the top-left corner, and confirm to save the changes.

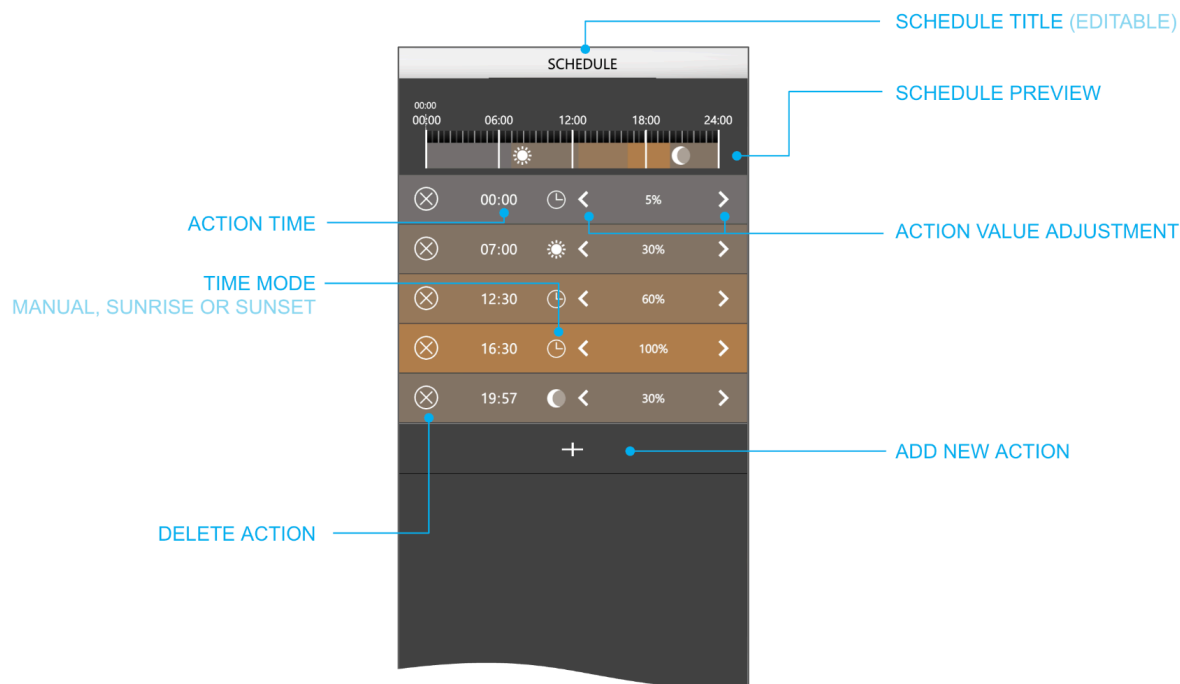
7.3.3 Disabling profiles

Daily profile can be disabled by pressing the corresponding button  in order to deactivate it. This is useful to avoid losing the configuration of a profile, even when it is not necessary (e.g. seasonal profiles).

A disabled profile still exists in the project, but is not active, until re-activated again. It is also possible to enable or disable profiles automatically, when specific TRIGGERS happen, with the help of the SCHEDULE MANAGERS, available in administration in the ADVANCED FUNCTIONS; please refer to the dedicated documentation for further details.

7.3.4 Actions

By entering a daily profile, it is possible to define the list of actions to be done along the 24 hours. This is possible by pressing the [+] button, and entering the following information:



Each action consists of a value to be sent at a specific time; the time can be set manually, or associated to the integrated astronomic clock:

⌚	Manual time
☀	Sunrise
🌙	Sunset

When the list of actions is complete, press the back button on the top-left corner, and confirm the changes. The profile preview updates accordingly everywhere in the software.

8 Basic functions

8.1 Scenes

DELÉGO SERVER offers the possibility to create sequences of commands and actions, optionally conditioned by delays or conditions, called SCENES or SCENARIOS. SCENES/SCENARIOS can be created in the Administration View, by installers and system integrators, or directly in the Visualisation View by the end user.

8.1.1 Creating a scene in the Administration view

To create a new scenario in the configuration environment you need to proceed as follows:

- Access the Administration View.
- Select SCENES by navigating to BASIC FUNCTIONS > SCENES.
- Press the [+] button in the toolbar to create a new scene.

In the details page, the following parameters are available:

NAME	Name of the scenario.
ROOM	Environment where the user wants to execute the scenario.
VISIBLE	Enables or disables the visibility of the scenario in the Visualization View.
EXECUTE AT STARTUP	Enables or disables the execution of the scenario at system start up.
ALLOW EDITING IN VISUALIZATION	Enables or disables the authorization to the final user to modify or delete the scenario from the Visualization View.
ENABLE CLOUD SYNC	Enables or disables the cloud synchronization of the scenario.
VOICE CONTROL	Information box that informs if the scenario can be commanded by voice control.

If the expert mode is enabled, also the following options are visible:

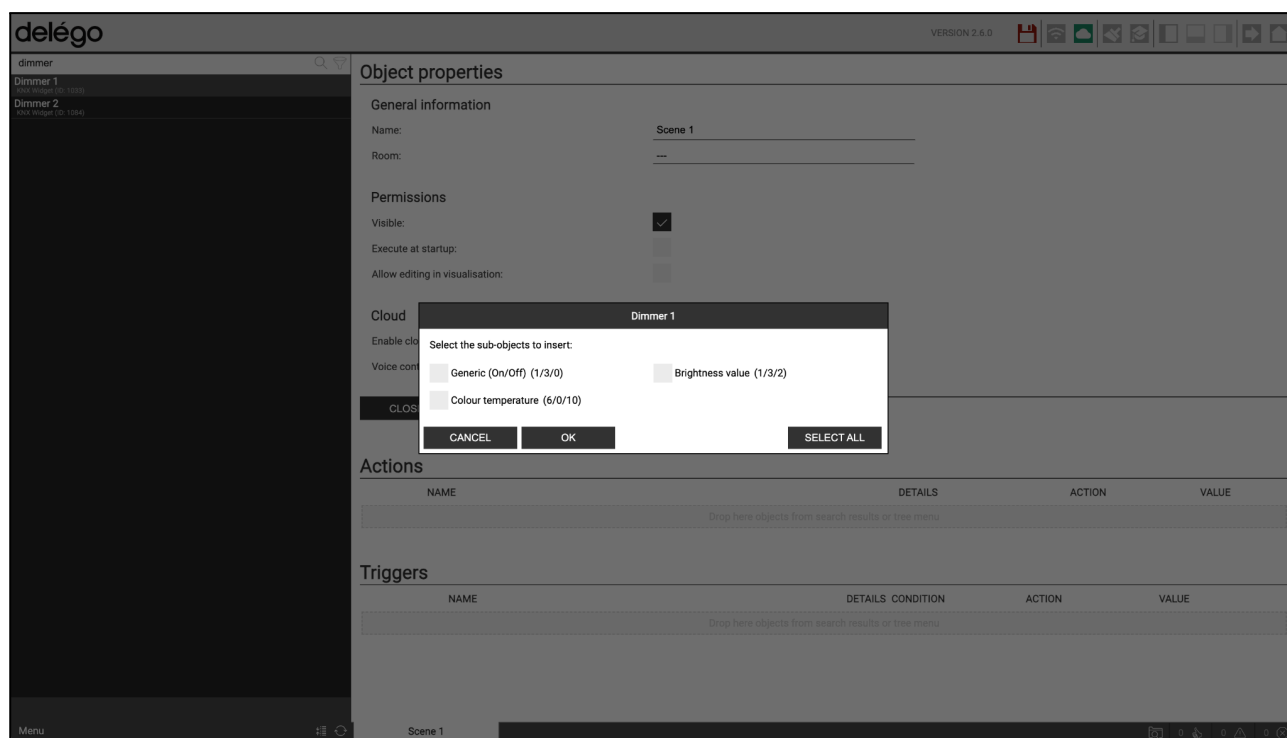
DELAY BETWEEN ACTIONS (SECONDS)	Allows you to set a delay between the actions in the scenario.
ENABLE 'LEARN' FUNCTION	If enabled, a button with a Camera icon will appear in the Visualization View. By pressing the button the state of the objects of the scenario is stored, and this state will be commanded when the scenario is executed again.
ENABLE PIN CONTROL	Enables or disables the scenario control by means of a PIN
NEW PIN REPEAT NEW PIN	Allows you to set the pin if the enable pin control is activated.

8.1.2 Adding an action to a scene

Once a SCENARIO is created you can associate one or more actions to the scenario:

- Search the objects you want to control in the scenario (using the search toolbar) and select them (you can use the CTRL key of the keyboard if you need to select more than one object).
If you need to search KNX objects belonging to KNX widgets:
 - Activate the EXPERT mode .
 - Enter a keyword in the search toolbar (e.g., KNX address or label).
 - Select the object from the results.
- Drag the object(s) into the ACTIONS section, ordering the objects in the way the action must be executed.
- For each object, specify the ACTION to perform and – if required – the VALUE to set. In case of KNX objects, select "WRITE" as the action and the value - among those proposed, based on the type of object - to send on the bus when the scenario is followed.

If a WIDGET is dropped into a SCENE, the following dialog is displayed:



Since a WIDGET is a collection of objects, representing different commands that can be sent on a fieldbus (KNX, MODBUS etc...), it is required to specify which of them must be commanded as an ACTION of the SCENE.

8.1.3 Delays

It is possible to add a *delay* among the actions of a scene. In the Administration view, the procedure to add a delay to a SCENE is the following:

- Enter the keyword “wait” in the SEARCH
- Select the desired predefined delay(s)
- Drop into the ACTIONS list, in the desired position of the sequence

The following predefined delays are available:

- 1/2/5/10/15/20/30 seconds.
- 1/2/5/10/15/20/30 minutes.
- 1/2/3/6/12/24 hours.

During a delay, the SCENE can be stopped in two different ways:

- By pressing the STOP button in the visualisation
- With an AUTOMATION which sends the STOP command to the SCENE

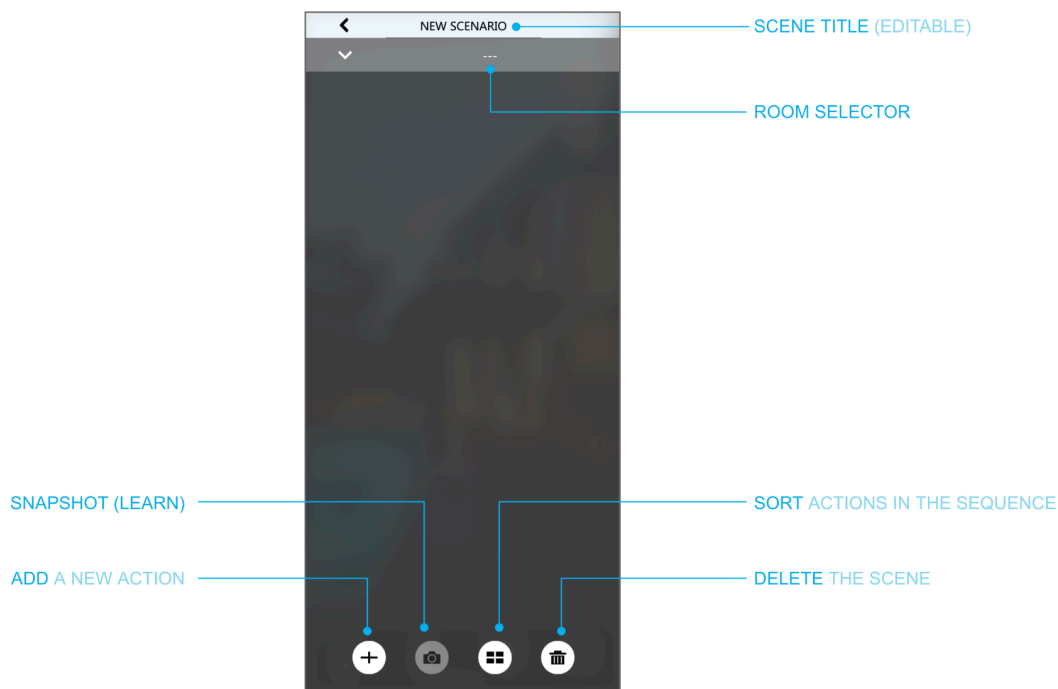
In both the cases, when a SCENE is stopped, the actions following the WAIT in the sequence are no longer executed. Please take care to the fact that the SCENE is not *reverted* to the initial state.

8.1.4 Creating a scene in the Visualisation view

By selecting the navigation menu item

NEW SCENARIO

the following popup is displayed:

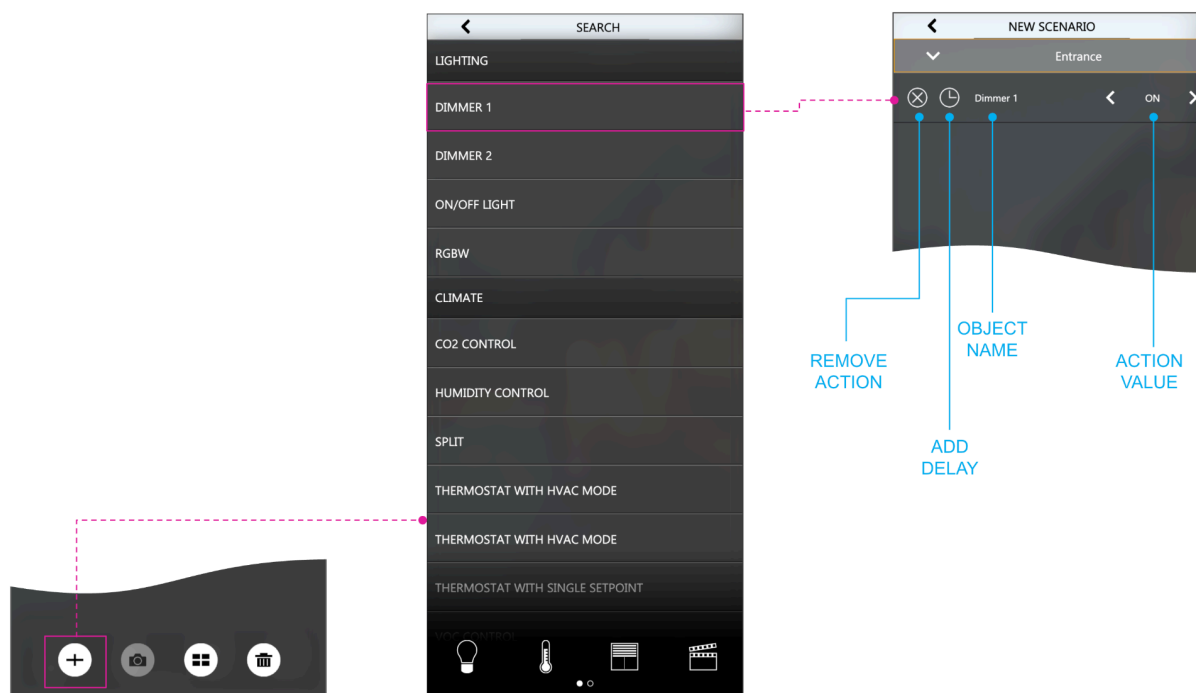


To change the name of the SCENE, edit it directly in the popup title. Add also the SCENE to an existing ROOM, in order to make it visible in that environment.

The following action buttons are available in the bottom part of the popup:

ADD	Search for an object to be added to the sequence
SNAPSHOT (LEARN)	Memorize the status of all the associated objects to their actual state. The sequence will command them to this new state, instead of the original one.
SORT	Change the order of the actions in the sequence
DELETE	Erase definitively the scene

By pressing the ADD button, a list of all the available widgets is displayed, organized by function. It is possible to filter the list by entering one or more keywords in the title of this popup.



When an object is added to the list of actions, it is possible to change the value with the selector on the right; this is the value that will be sent each time the SCENE is executed.



When a widget is selected to be added to a SCENE in the visualisation, its sub-object with the “SCEN” flag is actually associated as an action. Change the flag in the edit page of the widget, in order to make the end user act on another sub-object (e.g. the brightness of a dimmer, instead of the ON/OFF) when adding the widget to scenes.

By pressing the “clock” symbol, a delay is added **before** the selected action; increase the seconds / minutes / hours to introduce a “pause” during the sequence.

8.1.5 Executing scenes

To execute a SCENE in the visualisation, locate it in the ROOM to which belongs, and press the PLAY button on the right.

If the SCENE is enabled for the STOP, press the button again to interrupt the sequence.



8.2 Virtual objects

Virtual objects can be used to simulate “real” objects by storing values. To create a virtual object navigate in the section

BASIC FUNCTIONS > VIRTUAL OBJECTS

And click the [+] button on the toolbar. The main properties to configure are:

NAME	Identifies the variable within the supervision
DESCRIPTION	Description optional
LIBRARY	Icon that is used to graphically represent the object in the Visualization View.. It is possible to choose the appearance by clicking the icon and selecting or uploading a picture in the popup.
VALUE TYPE	Option that defines the type of value to store in the virtual object: • BOOLEAN VALUE. • NUMERIC - INTEGER. • NUMERIC - FLOAT. • STRING.
FUNCTION	Select the type of function of the virtual object (lighting, climate, etc).

If “Expert mode”  is enabled, the following additional options are displayed:

FORMATTING	Allows you to set a custom format of the object value using the “sprintf” convention, for example: %s%% → Value followed by “%” symbol. %0.2f → Value rounded to 2 decimal places. %0.1f°C → Value rounded to 1 decimal place followed by “°C”.
VISIBLE	Enable or disable the visibility of the virtual object in the Visualization View.
WRITE PERMISSION	If enabled, the object cannot be controlled by the final user.
ENABLE SCHEDULE	If enabled, the object can be affected by a programmed scheduler in the Visualization View.
ENABLE PIN CONTROL	If enabled, the virtual object can be protected with an authentication method.

8.3 Circadian

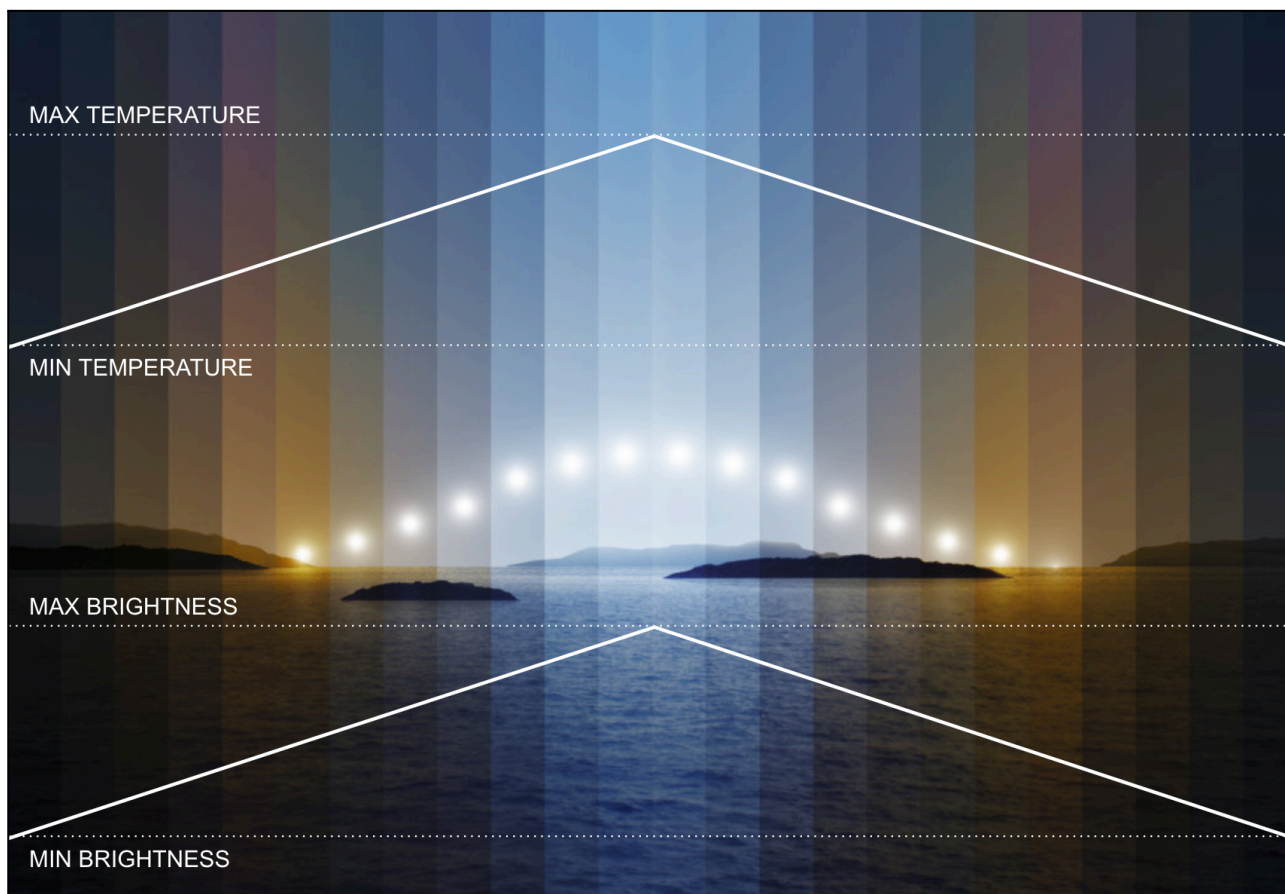
DELÉGO SERVER can adjust in an automatic way the light temperature and/or the intensity of dimmer lights throughout the day according to the "circadian cycle"; in this way you can simulate the natural lighting of the sun. It is possible to configure one or more independent circadian cycles, each of them operating according to the configured settings and associated with one or more lights that must be controlled. To configure a circadian cycle, access the section

BASIC FUNCTIONS > CIRCADIAN

and press the [+] button to add a new item. In the edit page of the circadian set the following information:

NAME	Name of the circadian cycle in Delégo project
TYPE OF CYCLE	It allows you to set when the circadian cycle's logic will be executed: • Fixed times: the adjustment takes place between two pre-established hours of the day. • Astronomical: the adjustment follows the sunrise and sunset times, considering an offset.
START TIME END TIME	If "Fixed times" is selected, these options indicate respectively the starting and ending time of the natural light regulation performed by the circadian's logic.
START OFFSET (M) END OFFSET (M)	If "Astronomical" is selected, these options are used to set an offset of the sunrise and sunset. Positive values extend the cycle duration after the sunrise/sunset, while negative values reduce the cycle duration after sunrise/sunset.
MIN TEMPERATURE VALUE MAX TEMPERATURE VALUE	They indicate respectively the minimum (hot) and maximum (cold) temperature of the light that the circadian cycle must respect.
CHANGE INTENSITY	If the option is selected, during the circadian cycle the temperature of the lights can be controlled by the logic of the circadian.
MINIMUM INTENSITY VALUE MAXIMUM INTENSITY VALUE	They indicate respectively the minimum and maximum intensity value of the dimmers that the circadian cycle must respect.

The following figure represents the adjustment cycle of the dynamic white temperature and of the light intensity throughout the day:



Once the configuration of the circadian is completed it is necessary to drag and drop in the Widget section the KNX Widgets representing the Dimmers that must be controlled by the circadian logic. If the temperature control is disabled, only the brightness level is applied to the dimmer(s).

The START button starts the execution of the circadian.

9 Notifications

Notifications are messages that DELÉGO SERVER sends to the users when specific actions, called TRIGGERS¹, occur. Notifications can be displayed on the web server (on-screen notifications) or a DELÉGO PANEL, push notifications on the smartphone, e-mails or Telegram messages.

9.1 On-screen notifications

These types of messages are displayed in the Visualisation View, in a specific popup accessible in the navigation menu, and automatically opened when a message of type “alarm” is received. To create an on-screen notification:

- Access the Administration view.
- Select NOTIFICATIONS > ON SCREEN NOTIFICATIONS.
- Press the ADD button on the toolbar.
- Access the edit page of the new object created.

To configure a notification set the following information:

NAME	The name of the notification.	
MESSAGE CONTENT	Content of the message that will be displayed. The message of a notification can contain dynamic text, i.e., DELÉGO can automatically insert an information of the object using keywords:	
	{{obj.name}}	It will be replaced with the name of the object that triggers the notification
	{{obj.current_value}}	It will be replaced with the current value of the referenced object
	{{obj.id}}	It will be replaced with the unique id of the object that triggers the notification
TYPE	Specifies the type of message: alarm, warning, information. The type of message affects the color of the banner that will be displayed: red for an alarm, yellow for a warning and blue for an information message.	

Once a notification is created, it is necessary to associate it with an object through a TRIGGER so when the state of the latter changes, the system generates the message.

To link a notification to a trigger, drag from the lateral menu the object or the objects and select which values should be used for the trigger condition of the notification. NOTE: the object must be searched using the search toolbar.

¹ Refer to the AUTOMATIONS [D2] application manual for further details about the TRIGGERS

9.2 Email notifications

Email notifications are sent to one or more recipients when a specific TRIGGERS¹ occurs. To create an email notification:

- Access the Administration view
- Select NOTIFICATIONS > E-MAIL NOTIFICATIONS
- Press the ADD button on the toolbar.
- Access the edit page of the new object created.

To configure a notification set the following information:

NAME	The name of the notification.	
RECIPIENTS	One or more email addresses (separated by commas or semicolons).	
MAIL SUBJECT	The email subject.	
MESSAGE	Content of the email that will be sent. The message can contain dynamic text, i.e., DELÉGO can automatically insert an information of the object using keywords:	
	{{obj.name}}	It will be replaced with the name of the object that triggers the notification
	{{obj.current_value}}	It will be replaced with the current value of the referenced object
	{{obj.id}}	It will be replaced with the unique id of the object that triggers the notification

In the EXPERT mode  it is also possible to enter CC and BCC addresses.

After creating a mail it is necessary to link the trigger to an object; the procedure is the same as the On-screen notification.



The sending of email notifications is subject to the settings entered in the SETTINGS > EMAIL SETTINGS.

9.3 Push notifications

DELÉGO can notify an user also by means of push notification on the smartphone; requirement to activate push notification is that the final user has DELÉGO mobile app installed on his mobile. Push notifications can be received even if the app is turned off or in the background, or the device it's in stand-by. By default, when an On-screen notification is triggered, also a push notifications will be sent; to disable this function, access the following section

NOTIFICATIONS > PUSH NOTIFICATIONS > OPTIONS

To manually configure a push notification:

- Access the Administration view.
- Select NOTIFICATIONS > PUSH NOTIFICATIONS.
- Press the ADD button on the toolbar.
- Access the edit page of the new object created.

To configure a notification set the following information:

NAME	Identifies the notification within the project.
TITLE	On devices that support it, it is used as the notification title.
MESSAGE	Content of the push notification that will be displayed.

After creating a push notification it is necessary to link the trigger to an object; the procedure is the same as the On-screen notification.

9.4 Telegram notifications

DELÉGO SERVER can send messages to one or more chats on the popular TELEGRAM app.



For more details about this service, please refer to [D3].



In software versions before the 2.7.0 this item was located in another section of the administration menu.

9.5 Delégo Panel notifications

DELÉGO SERVER can send messages directly to one or more DELÉGO PANEL; this special kind of notification determines the visualisation of the message on top of any other app and eventually the reproduction of a sound effect (according to the settings of the touch panel).

In order to receive this type of notifications, the NOTIFICATION CENTER app must be preliminarily installed on the panel.

After having created a new notification, in its details page it is required to enter the following information:

NAME	Identifies the notification within the project.
IP ADDRESS	The address in the LAN network of the destination touch panel
TYPE	The level of severity of the message. Can be INFORMATION, WARNING or ALARM
STRING	The text of the notification, which can eventually contain dynamic parts. Refer to the on-screen notifications for more details.
NOTIFICATION TIMER	The number of seconds of persistence of the message on the screen before returning to the original app
NOTIFICATION SOUND	Enables the reproduction of a sound when the message is received (according to the settings of the touch panel app)

The screenshot shows the 'delégo' web interface. On the left is a sidebar menu with categories like 'Menu', 'Field technologies', 'User interface', and 'Links'. The main area is titled 'Generic settings' and contains a 'General information' section with the following fields:

- Name: Entrance Delégo Panel notification
- IP Address: 192.168.1.120
- Type: Information
- String: This is a sample message!
- Notification timer: 30
- Notification sound: ☒

Below these fields are 'CLOSE' and 'TEST' buttons. A 'Triggers' section is at the bottom, showing a table with columns: NAME, DETAILS, CONDITION, ACTION, and VALUE. The table is currently empty, with a note: 'Drop here objects from search results or tree menu'.

9.6 Notification log

This page allows you to consult a history of all the notifications sent by DELÉGO, with the relevant date/time and the message sent to users.

10 Advanced functions

This section contains all the advanced features that can be used to implement automations that can be executed by DELÉGO SERVER.



The Advanced functions section can be enabled only if enabling the “Expert mode” .

10.1 Generic Widgets

In this section you can create widgets that are not directly related to a technology (i.e., KNX, Modbus. etc); they are similar to a KNX WIDGET, but the sub-objects can be from different technologies.

To create a new WIDGET, press the corresponding ADD button, then drag the objects representing the corresponding command or state into the sub-objects section (they must have been previously created in other sections of the software).

10.2 Combinatorial operators

Combinatorial operators are logical operators that perform the following operations on boolean variables (0 and 1, or TRUE and FALSE):

- AND.
- OR.
- NOT.
- Free expression (combination of the previous).

Combinatorial operators can be used in Connections or Logics. Refer to **[D2]** for further information.

10.2.1 Create a new operator

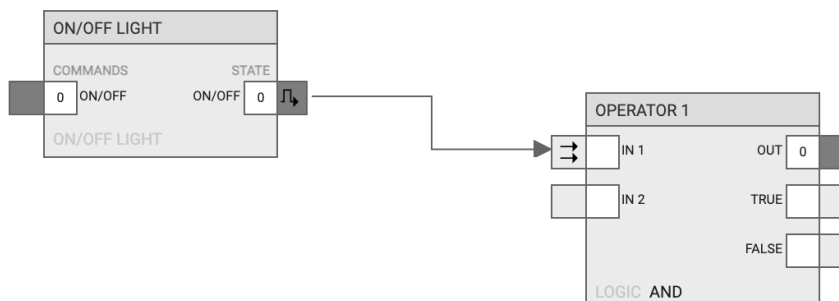
To create a new operator, navigate to the following section in the Administration View

ADVANCED FUNCTIONS > COMBINATORIAL OPERATORS

and click the [+] button of the toolbar.

10.2.2 Add to a connection

To use an operator in a connection, open the Connection editor and drag and drop the operator in the editor, and then connect the first input node to the output node of another object; when connecting the first input of the combinatorial operator, a new input node will be displayed. In the following example it is displayed an AND operator that receives as input the state of an ON/OFF light:



It is possible to modify the type of operator by right clicking on the operator and selecting the operator on the lateral toolbar that will be opened.

The output of the operator can be connected to another object (e.g., a KNX group address) to trigger some action (for example, if the light is on, the system can communicate the status of the light to the user by means of a push notification); the possible output nodes are the following:

OUT	The result of the logic operator and it is a numeric value (0 or 1). Used when usually there are 2 or more inputs.
TRUE FALSE	The evaluation of the input, usually it is used when there is only one input connected to the operator. It is possible to connect it to another object to trigger an action only when the result is TRUE or FALSE respectively.

10.2.3 Manual configuration

It is possible to configure the operator and its inputs and outputs using the edit page of the operator itself.

Object properties

General information

ID

1084

Name:

Operator 1

Description:

Logic

Logic function:

AND

CLOSE

Actions

NAME	DETAILS	CONDITION	ACTION	VALUE
Drop here objects from search results or tree menu				

Triggers

NAME	DETAILS	CONDITION	ACTION	VALUE
Drop here objects from search results or tree menu				

In this case, choose the logic function of the operator (AND/OR/NOT) and drag and drop the input conditions of the operator in the TRIGGERS section. The ACTION section will contain the objects that will execute an action if the result of the operator is respected.

10.3 Value comparisons

The operator performs a comparison between two numerical values (integer or float): >, <, >=, <=, = and range checks. The inputs can be dynamic (i.e., the value is retrieved from another object) or static (i.e., one of the inputs is a fixed value).

Value comparison operators can be used in Connections or Logics. Refer to [D2] for further information.

10.3.1 Create a new comparison

To create a new comparison operator, navigate to the following section in the Administration View

ADVANCED FUNCTIONS > VALUE COMPARISONS

and press the [+] button of the toolbar.

10.3.2 Add to a connection

To use a comparison value operator in a connection, open the Connection editor and drag and drop the operator in the editor, and then connect the REF node to the first object that will be the *reference* value of the comparison. The IN 1, IN 2, etc are the inputs that will be compared with the REF by the operator.

The type of operator can be selected by right clicking the operator and choosing the operation in the lateral toolbar that will be opened.

The output of the operator can be connected to another object (e.g., a KNX group address) to trigger some action (for example, if the temperature measured by a thermostat is lower than a threshold, power on heating system until the temperature is set to a fixed value); the possible output nodes are the following:

OUT	The result of the comparison operator and it is a numeric value (0 or 1). Used when usually there are 2 or more inputs.
TRUE FALSE	The evaluation of the input, usually it is used when there is only one input connected to the operator. It is possible to connect it to another object to trigger an action only when the result is TRUE or FALSE respectively.

10.3.3 Manual configuration

It is possible to configure the operator and its inputs and outputs using the edit page of the operator itself.

Object properties

General information

ID

1085

Name:

New Condition 1

Description:

Logic

Reference object:

Please drag the desired object in here

Condition:

Minor than

1

CLOSE

Actions

NAME	DETAILS	CONDITION	ACTION	VALUE
Drop here objects from search results or tree menu				

In this case, choose the comparison operator (<, >, <=, >=, etc) and drag and drop in the reference object the *reference* value. The input IN must be configured using the selector and there are two ways:

- Drag and drop an object or sub-object as input.
- Manually write the value.

The ACTION section will contain the objects that will execute an action if the result of the operator is respected.

10.4 Math operators

The operator performs an algebraic operation between two or more numerical values (integer or float): +, -, x, /. The inputs can be dynamic (i.e., the value is retrieved from another object) or static (i.e., one of the inputs is a fixed value).

Math operators can be used in Connections or Logics. Refer to [D2] for further information.

10.4.1 Create a new operator

To create a new comparison operator, navigate to the following section in the Administration View

ADVANCED FUNCTIONS > MATH OPERATORS

and press the [+] button of the toolbar.

10.4.2 Add to a connection

To use a math operator in a connection, open the Connection editor and drag and drop the operator in the editor and then connect the first input node to the output node of another object; when connecting the first input of the combinatorial operator, a new input node will be displayed.

The type of operator can be selected by right clicking the operator and choosing the operation in the lateral toolbar that will be opened.

The output of the operator can be connected to another object (e.g., another operator) to perform other calculations (for example, the output of a math operator can be the input of a value comparison operator); the only output node is:

OUT	Numeric (integer or float) result of the algebraic operation.
-----	---

10.4.3 Manual configuration

It is possible to configure the operator and its inputs and outputs using the edit page of the operator itself:

Generic settings

General information

ID: 1099
Name: Math operator 1
Operation: x
Type: Numeric - Integer

CLOSE

Actions

NAME	DETAILS	CONDITION	ACTION	VALUE
Drop here objects from search results or tree menu				

Triggers

NAME	DETAILS	CONDITION	ACTION	VALUE
Drop here objects from search results or tree menu				

In this case, choose the mathematical function of the operator (+, -, /, x) and drag and drop the inputs of the operator in the TRIGGERS section. The ACTION section will contain the result of the mathematical operation.

10.5 Integrators

This operator performs the calculator of the integral of the input. Inputs can be only numerical values (integers or reals).

Integrators can be used in Connections or Logics. Refer to [D2] for further information.

10.5.1 Create a new integrator

To create a new comparison operator, navigate to the following section in the Administration View

ADVANCED FUNCTIONS > INTEGRATORS

and press the [+] button of the toolbar.

10.5.2 Add to a connection

To use an integrator in a connection, open the Connection editor and drag and drop the operator in the editor and then connect the VALUE node to the output node of another object.

The output can be connected to another object (e.g., another operator) to perform other calculations (for example, the output of an integrator can be the input of a math operator); the only output node is:

VALUE	Numeric (integer or real) result of the integration operation.
-------	--

10.5.3 Manual configuration

It is possible to configure the operator and its inputs and outputs using the edit page of the operator itself:

Object properties

General information

ID

1100

Name:

New Integrator 1

Description:

Appearance

Library:

123

Formatting:

Permissions

Write permission:

☒

Enable Schedule:

☒

Logic

Scale factor:

1

Type of data:

Real

Security

Enable PIN control:

☐

New PIN:

Repeat new PIN:

CLOSE

Input object of the integrator

ID

NAME

Drop here objects from search results or tree menu

New Integrator 1

The main settings that must be configured are:

SCALE FACTOR	Apply a multiplier to the calculation, if different from 1
TYPE OF DATA	Select if the calculated value must be of type REAL or INTEGER.

Drag and drop the input of the operator in the INPUT OBJECT OF THE INTEGRATOR section.

10.6 String pilots

It is possible to control devices via IP protocol by sending strings, using the String pilot objects. These objects, when triggered by an event, can open a TCP, UDP or HTTP connection with a device on the network and send a command string, for example a command to change the state of a device.

To configure a String pilot navigate in the following section

ADVANCED FUNCTIONS > STRING PILOTS

and press the [+] button in the bottom toolbar; after accessing the edit page set the following information:

NAME	Name of the String pilot in the Delégo project.
COMMUNICATION	Specify if the string will be sent through a network connection (e.g., ETH) or through serial/USB cable.
IP ADDRESS IP PORT	Specify the IP address and port of the device that must be controlled with the string. In case of HTTP connection the port is 80.
PROTOCOL	Select between HTTP, HTTPS, TCP or UDP
STRING	Enter the command string that must be sent to the device.

In the case of HTTP calls, the STRING will be composed by the IP address and port; in this example, the string allows you to open a lock of a 2N IP video intercom:

<http://192.168.1.123:80/api/switch/ctrl?switch=1&action=on>

After the configuration it is possible to perform a test of the communication using the button “Test”.

10.7 Status byte

STATUS BYTES are objects that can receive as input a value composed of sub-information (at single bit level or group of bits level); this information must be separated and interpreted individually. This type of information is often used in both KNX and MODBUS environments.

To create a Status Byte navigate in the following section:

ADVANCED FUNCTIONS > STATUS BYTE

and press the [+] button in the bottom toolbar; after accessing the edit page it is possible to drag the value to be decoded (in the Inputs section) and the sub-objects that will host the sub-information of the value received in input (in the Outputs section). Alternatively, it is possible to add an Output.

For each of the Outputs, you can specify the following options:

BOOLEAN	Indicates if the object is a boolean value (e.g., ON/OFF)
OFFSET	Index of the first bit (considering the MSB (Most Significant Bit)) from where the information must be read.
LENGTH	Number of bits from the offset to consider for the information reading. This information can be set only for non-BOOLEAN objects.

After each configuration change, press the UPDATE button; the EXAMPLE column helps to identify which bits are taken into consideration by each sub-object, assuming that the input value is on a single byte. By

trying to simulate sending values to the input object via its STATUS column, it is possible to verify in real time that the sub-objects are correctly valued.

10.8 Repeaters

In some particular situations it may be useful to periodically send a signal of one or more objects to the respective technologies, to have a confirmation of their status and compare it to the one retrieved from DELÉGO SERVER in order to avoid misalignment. For this purpose you can use a REPEATER; this object allows you to reiterate the value of the state of one or more objects present in the section Inputs, when one of the following conditions occurs:

- Cyclically every time a timeout in ms is elapsed.
- When a certain condition occurs.

For the first case it is necessary to enable the "Execute in a loop" selector, specifying also a loop time (in ms). It is suggested to also enable "Execute at startup" so that the execution of the repeater is started when the server is turned on. Once the parameters have been set, the REPEATER must be started with the START button.

When the loop flag is not set, it is needed to drag and drop an object in the Inputs section, specifying a possible filter on the state that must determine the execution of the repeater.

In both cases, it is possible to set a time (in seconds) between the execution of one command and the next one, in the list of associated objects.

10.9 Semaphores

Semaphores are objects that allow you to check if a certain condition is verified, using a series of conditions that depend on how many objects are used as inputs of the semaphore. Based on the outcome of the checks on the objects, the semaphore can have three states:

GREEN	The desired condition is verified.
YELLOW	The condition is in a state of alert, as there are one or more unverified condition(s).
RED	The condition is in an alarm state, since one or more conditions marked as "priority" are not verified or the semaphore was YELLOW for too long.

The items that must be configured for the correct semaphore management are:

NAME	Semaphore identification label, which is shown in the output/input connections of the associated objects.
LOGIC FUNCTION	Indicates the type of combinatorial operator applied to the different conditions to monitor to determine the status of the semaphore: • AND → all conditions must be verified • OR → at least one condition must be verified

	NOTE: The logic function must always be selected.
TIMER IN SECS.	This timeout indicates the time, in case there are no priority conditions, that must pass before the semaphore switches from a state YELLOW state to a RED state.

In the Monitor Condition section, drag and drop the objects you want to monitor; for each object is needed to set the following parameters:

CONDITION	In this field it is needed to choose the type of comparison operator (<, >, =) to apply between the current state of the object and the value set in the VALUE field.
VALUE	Object state value that must be compared with the current state of the object.
PRIORITY	If the field is selected the semaphore will go to RED state as soon as the condition is true.

When all the properties are configured, run the semaphore with the START button; the system will start to monitor all the different conditions; as long as they are satisfied, the semaphore will stay in the GREEN state. If one or more than one condition(s) is not met, the semaphore can go in the YELLOW state or to the RED state, depending on the priority configuration.

Example

Consider a semaphore configuration to monitor a motorized valve.

Normally the valve is in a completely open or completely closed condition, and the respective end-of-stroke signal is ON. The logic function in this case is an OR (is ON in case the valve is closed or is opened), so the semaphore will be GREEN as long as one of the two limit switches is active. In case the valve is being operated, for the entire time it takes to close or open none of the limit switches detects the end-of-stroke, therefore the semaphore is in the YELLOW state. However, this condition is to be considered normal if the valve is open or is closed within a timeout. So if the semaphore stays in the ALERT for more than the timeout something has hindered the complete opening (or closing) of the valve: in this case the semaphore switches to RED state, and this condition can be associated with - for example - an email notification.

Another example is the monitoring of the lights state of a building; in this case it will be used as an AND operator. The condition that must be met is that all the lights should be OFF before exiting the building. If the burglar alarm is enabled and one or more than one light of the house is ON, the semaphore is in RED state, otherwise is GREEN.



SEMAPHORES can be inserted into LOGIC PROGRAMS in order to manage their state and cause actions on other supervision objects.

10.10 System information

The system information section contains objects that represent the server's status: internet connection, date, time and external memory state. These objects can be used to supervise the server and trigger actions or notifications when, for example, there is no internet connection or the external memory (SD card or USB device) is full. Date and Time can also be used as inputs of other technologies.

10.11 Clocks

DELÉGO SERVER allows you to create one or more CLOCKS. This tool operates like schedules, but it can be inserted within a Connection, Logic or in an environment (room); if the object belongs to a room it can be used to plan different objects.

The options that distinguish these objects are:

NAME	Name of the clock that is displayed in the Connections of the associated objects.
ENABLE PLANNING	Allows you to enable or disable a schedule on the clock.
ROOMS TO WHICH THE OBJECT BELONGS	List of rooms/environments in which the clock is belonging to.
ACTIONS	List of objects affected by the clock planning.

To configure a new Clock it is necessary to:

- insert the object to in the Actions section.
- Choose the condition to perform an action at a specific time.
- Insert the clock into a room, connection or logic.

In the DELÉGO Visualization View the Clock is displayed as a scheduler.



CLOCKS can be inserted into LOGIC PROGRAMS in order to drive other logics based on their activation time.

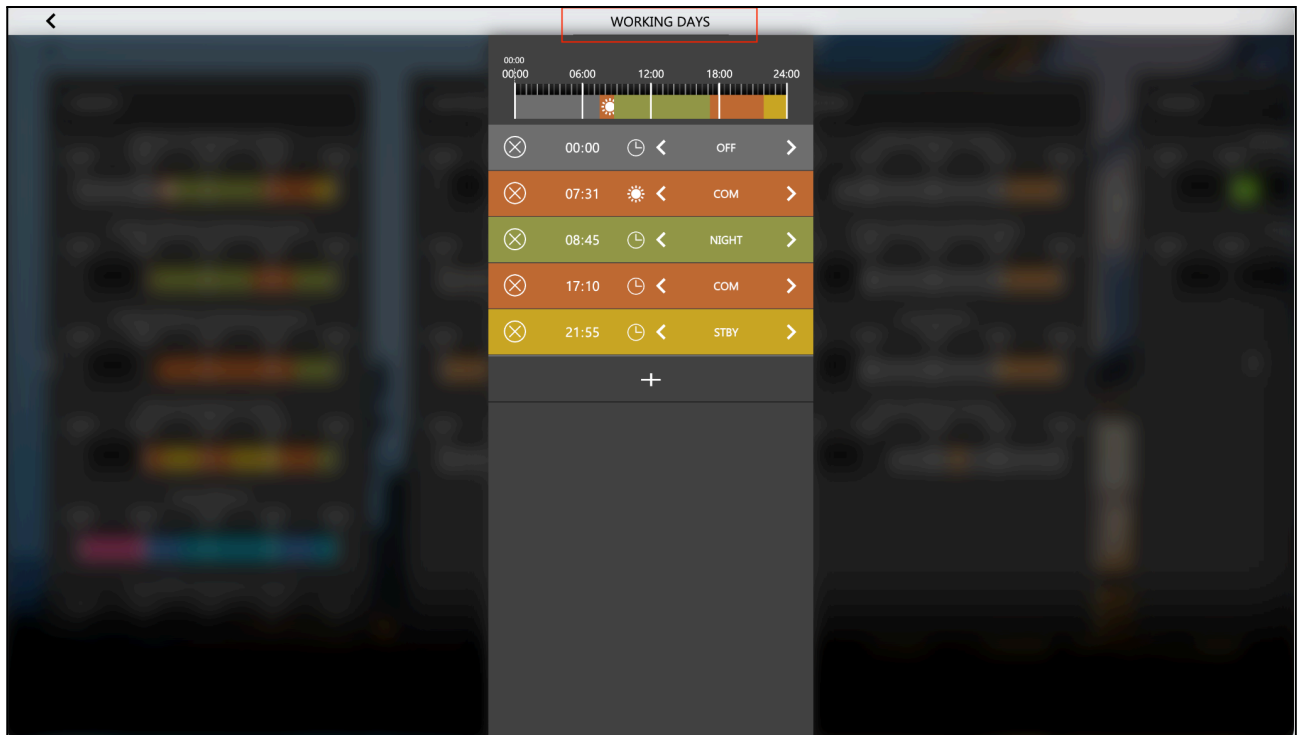
10.12 Schedule managers

It is possible to enable or disable schedulers using the Schedule Manager object, that can be found in the following section:

ADVANCED FUNCTIONS > SCHEDULE MANAGERS

To create a Schedule manager click the [+] button in the toolbar; this type of object can receive an event from another object (e.g., logic, scenario, etc) and enable one or more schedulers.

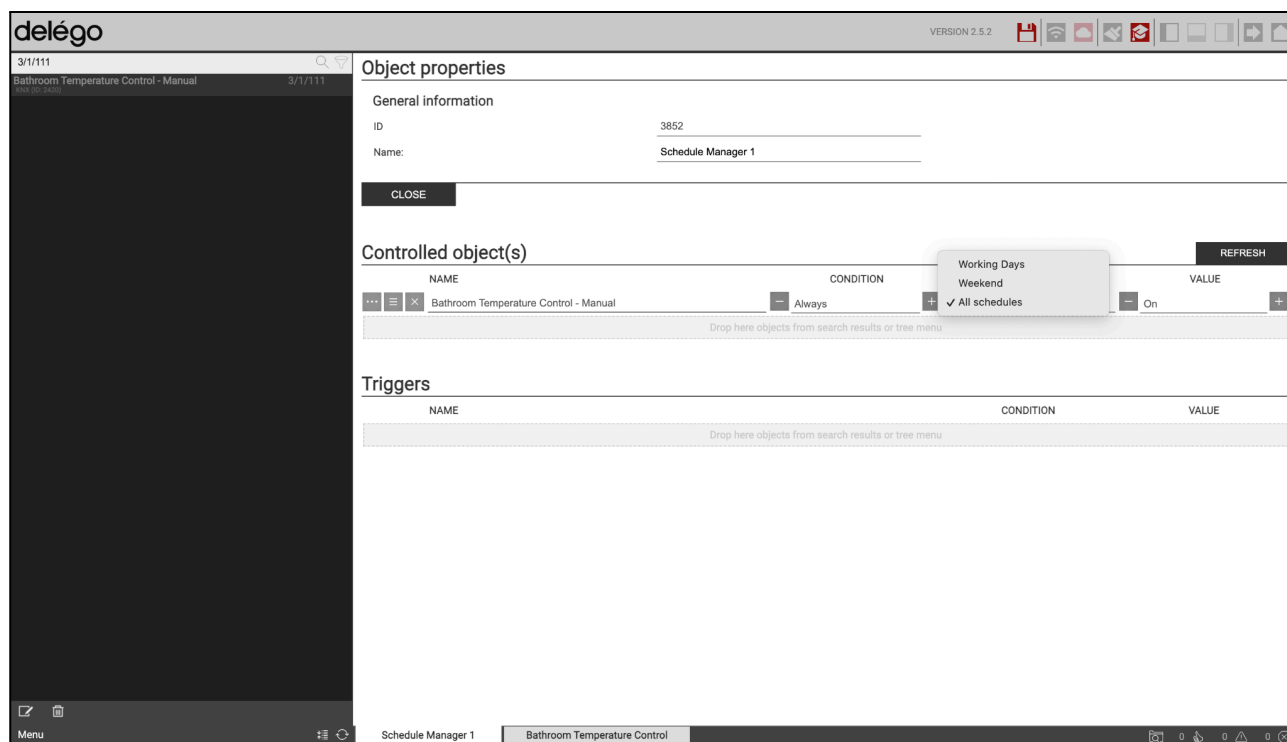
As an example, we want to enable or disable the schedulers of the KNX widget named "Bathroom temperature control" during working days. This KNX widget represents the commands and control of an HVAC device in the office bathroom. The first step is configure and set a name the scheduler(s) in the Visualization View of DELÉGO SERVER; we are going to name the scheduler(s) WORKING DAYS:



The second step is to associate the Schedule manager with the object(s) affected by the scheduler(s) created in the previous step. To do so navigate in the Administration View, create a Schedule Manager in the section **ADVANCED FUNCTIONS > SCHEDULE MANAGER** and drop in the **CONTROLLER OBJECT(S)** one or more items of the project (by eventually enabling the **EXPERT mode**  in order to find also the hidden elements).

For each of them, set the following parameters of the object in the Controlled Object(s):

- **CONDITION:** determines when the scheduling enabling should be set (if every time the status of the schedule manager changes, or only if the state of the object is ON or OFF).
- **SCHEDULE:** choose the condition for the schedule enabling/disabling, or the item "ALL SCHEDULES" to control them all. In our example, the **WORKING DAYS** schedule must be selected.
- **VALUE:** specify whether, following a change of status of the schedule manager, the schedulers must always be disabled (OFF), enabled (ON) or aligned with the status of the schedule manager (CURRENT VALUE) or, with its inverted status (VALUE DENIED).



The final step is to determine when the schedule manager must enable or disable the associated schedulers. This can be done by dragging and dropping one or more objects in the Inputs section.

11 Presence simulator

It is possible to configure DELÉGO SERVER to simulate the presence of a person in a room or in the house with semi-random sequences of commands through a simulator that can be configurable in the following section:

AUTOMATIONS > PRESENCE SIMULATOR

The Presence Simulator is a sequence of Actions (that can be drag and drop in the ACTIONS section) which, unlike a normal sequence of a Scenario, are interspersed with a timing that is not constant, but can change within a certain pre-established limit; in this way the sequence of actions is not always identical.

Furthermore, unlike a common Scenario, the actions of the Presence Simulator are executed only if the object in the Enable section is enabled according to the conditions that are set up in the enable object; if the condition to perform the Presence Simulator is not valid, the timers between actions are still counted but the actions are not performed.

This allows you to set the presence simulation according to pre-established times and criteria, but then make it effective only when certain conditions are met, for example when the house owner is not at home. Like a Scenario, the Presence Simulator can START and STOP if a TRIGGER condition is valid.

The following table lists the main options needed to configure a Presence Simulator:

EXECUTE AT STARTUP	If enabled, the Presence Simulator will start at system startup.
RANDOM FACTOR	NOTE: this option is visible only if the “Expert mode” is enabled. It allows you to specify the random factor in minutes that is applied to the “wait” between the actions of the sequence; this factor is used to make the simulation executed between different days not deterministic.

Once these parameters are set, it is possible to set the actions to be performed by the simulator by dragging and dropping the objects in the ACTIONS section. You can set a waiting time between the actions by drag and drop of a WAIT object. As previously mentioned, the commands are actually sent only if the condition of the Enable object (pre-configured) is valid.

It is suggested to configure the Presence Simulator as follows:

- Do not run the Presence Simulator at startup, but plan the simulator to start after a condition is met, for example when night falls or the owner(s) exit the building.
- Set up a sequence that can last even longer than necessary, in order to foresee the case in which the random factor is too fast.
- Link the Enable condition to the presence of people in the building, for example the Enabling condition should consider the arming status of the burglar alarm.
- Configure the simulator in such way that it resets the home automation system to the state before the simulator execution (e.g., all the lights off) when the Enable condition is not more valid, in order to be sure that when the simulation is stopped the system returns to default state.

The presence simulator can be inserted into an environment (i.e., Room) to allow users to modify the sequence of actions using the mobile app, in a similar way to the Scenarios.

12 Settings

In this section it is possible to setup additional settings of the server, such as email configuration, customization of graphic libraries, advanced settings of the server (e.g., refresh interval, timeout for idle mode, etc) and settings for the map view if an environment's or room's GUI is configured with a map.

12.1 Email settings

This section allows you to set the parameters for sending email notifications. DELÉGO SERVER can manage the email sending with two methods. Using Ekinex's cloud service or using a SMTP server.

If the selected method is the cloud, it is not necessary to configure any information since it is the server that will manage the communication with the cloud to send the email. The user must be logged in to Ekinex's cloud in section SETUP > EKINEX CLOUD > PRODUCT REGISTRATION.

To configure an SMTP server it is necessary to enter the following information:

SMTP SERVER	Address of the SMTP server to which the e-mails are forwarded.
PORT	Port used to communicate with the SMTP server.
USE SSL PROTOCOL	Enable or disable the SSL encryption.

ACTIVATE AUTHORIZATION	Enable or disable the need to authenticate to the server. Usually authentication is needed.
USERNAME	The e-mail that you created when configuring the SMTP server.
FORWARDER (E-MAIL ADDRESS)	Sender address that will be displayed when the email is received by the recipient. It can be different from the one specified in USERNAME.
PASSWORD	Login password to the SMTP server. Created when configuring the SMTP server.

The following table shows an SMTP server configuration using Gmail.

SMTP SERVER	smtp.gmail.com
PORT	465
USE SSL PROTOCOL	Enabled
ACTIVATE AUTHORIZATION	Enabled
USERNAME PASSWORD	Enter your full Gmail address and your login password
SENDER ADDRESS	Specify your full Gmail address again, or leave it blank



If you want to use Gmail as an SMTP server, you must access the Google Account section on your browser, enter the "SECURITY" options and activate the option Allow less secure apps.

12.2 Graphic library settings

Renderings are a set of icons and attributes used by DELÉGO to set the graphic appearance of the objects displayed in the Visualization View (i.e., widgets). DELÉGO has a default library of icons that are used by the system but you can create new libraries by duplicating one of the already present items. To access the renderings page, navigate to

SETTINGS > GRAPHICS LIBRARY SETTINGS

in the Administration View. To create a custom rendering, you need to duplicate an existing one; since the number of libraries is very high, you can use the search functions to filter the item that you need to duplicate by inserting a keyword (e.g., light, dimmer, HVAC) and the software module (e.g., KNX, MBUS, etc).

The list of *renderings* shows the following information:

NAME	Identification label of <i>rendering</i> , which is shown in the rendering/icon selection popups in the respective objects tab
OBJECT TYPES	Types of object to which the <i>rendering</i>
LENGTH	Where applicable (e.g. KNX OBJECTS), specifies the length of data transmitted to the KNX device.
VALUES	Where applicable, display the possible values accepted by the widget.
LEVEL	Specifies if the item is part of the base library (SYSTEM) or was created (USER)

For each item it is possible to perform the following operations:

EDIT	Allows you to access the <i>rendering</i> and change its properties. This operation is possible only for USER items.
DUPLICATE	Allows you to duplicate a <i>rendering</i> .
REMOVE	Removes the <i>rendering</i> from the database. It is possible to delete only USER's items.



It is suggested to modify USER's items by keeping the customized rendering as similar to the original as possible to the original one, so that only a few settings need to be changed.

12.2.1 Creating a custom rendering

To create a new rendering, you need to duplicate an existing one. Once the list has been reloaded (custom renderings are always at the top of the list) you can access the new tab:

The screenshot shows the 'delégo' web interface. On the left is a sidebar menu with options like 'Menu', 'Setup', 'Tecnologie', 'Piani', 'Funzioni', 'Scenari', 'Notifiche', 'Logiche', 'Funzioni avanzate', 'Opzioni', 'Home', 'Impostazioni email', 'Menu di navigazione', 'Mappe grafiche', 'Funzioni', 'Avanzate', 'Libreria grafica', 'Controllo carichi', 'Monitor consumi', 'Data log', 'Servizi', 'Utenti e permessi', and 'Cambia password'. The main area is titled 'Proprietà' and contains several sections:

- Dati generali**: Includes fields for 'Nome' (Copia Inserimento ON/OFF), 'Valori ammessi' (Elenco di opzioni), 'Range di valori' (Minimo: 0, Massimo: 1, Passo: 1), 'Oggetti' (Tipo di oggetto: [KNX] KNX), and 'Aspetto grafico' (Funzione: Sicurezza, Formattazione: [checkbox] bile).
- Opzioni**: A table with columns 'ETICHETTA', 'VALORE', 'COLORE', and '_DPAD_THEME_ADMIN_EDITRENDERING_OPTIONS_HEADER_TRANSPARENCY'. It lists 'Disinserito' (value 0, color white) and 'Inserito' (value 1, color brown).

At the bottom, there are buttons for 'CHIUDI' and 'SALVA', and a status bar showing 'Libreria grafica' and 'Copia Inserimento ON/OFF'.

GENERAL PROPERTIES

In the PROPERTIES section you can specify the following:

NAME	Identification label of <i>rendering</i> .
ALLOWED VALUES	Allows you to establish if the <i>rendering</i> must include a limited set of options ("OPTION LIST") or a range of possible values ("VALUE RANGE") between a minimum and a maximum
MINIMUM MAXIMUM STEP	If "VALUE RANGE" is enabled, it is necessary to set the extremes of the range, and with what step the values can vary within them. Typically this last option allows you to establish the "granularity" of the rendering (typically used by the +/- buttons in the FRONTEND)
OBJECT TYPE	Allows you to choose the type of object to which the <i>rendering</i> ; select one from those available in the drop-down menu
FUNCTION	It allows you to choose which FUNCTION must be assigned to the objects so that the <i>rendering</i> can be chosen in the appropriate selection pop-up.
FORMATTING	Allows you to set a custom format of the object value using the "sprintf" convention, for example: %s%% → Value followed by "%" symbol. %0.2f → Value rounded to 2 decimal places. %0.1f°C → Value rounded to 1 decimal place followed by "°C".
VISIBLE	Enable or disable the visibility of the rendering.

OPTIONS

In the case of *rendering* with LIST OF OPTIONS, the following section of the same name allows you to set the characteristic attributes of each possible value managed by the *rendering* same:

LABEL	Label used to represent the current value of the object in text form (e.g. "on", "off")
VALUE	Numeric value corresponding to the current option (e.g. 1.0)
COLOR	Color used to represent the state
TRANSPARENCY	Transparency level set

It is possible to add new options using the ADD button; in this case, the new option is automatically generated by increasing the last available value by 1, without prejudice to the possibility of modifying it subsequently according to your needs. You can also remove an option via the corresponding button at the beginning of the line.

In the figure you can find an example of customized rendering, which refers to the operating modes of the thermostat widget.

The screenshot shows the configuration interface for a thermostat widget. On the left is a sidebar menu with categories like Floors, Functions, Scenes, Notifications, Logics, Advanced functions, Options, Load control, Consumption monitor, Data log, Access Control, Services, Users and permissions, and Change password. The main area is divided into two sections: 'Value range' and 'Options'.

Value range section:

- Minimum: 1
- Maximum: 3
- Step: 1
- Objects: [KNX] KNX
- Graphical aspect:
 - Function: Climate
 - Icon:
 - Formatting: ☐
 - Visible: ☒

Buttons: CLOSE, SAVE

Options section:

LABEL	VALUE	COLOR	TRANSPARENCY
Com	1		0
Stby	2		0
Custom	5		0

Buttons: ADD, Custom icons / objects, Custom HVAC Operating Mode*

12.3 Advanced settings

ENABLE DB CLIENT CACHE	Disable this option to prevent apps from downloading the project. Browsing from apps will be slowed down; change only in case of particular need (default: enabled).
DISABLE IP CHECK	Activate this option to loosen authentication controls, ignoring any changes in the client's address and therefore still considering the browsing session valid. Activate only in case of particular need.
AUTO-REFRESH INTERVAL (SEC)	Number of seconds that elapse between one query of the status of the interactive elements and the next
INACTIVITY TIMEOUT FOR ENTERING IDLE MODE	Number of seconds after which the querying of the states is slowed down. Enter "-1" to never slow it down.
AUTO-REFRESH INTERVAL IN IDLE MODE (S)	Number of seconds between one query and the next when in IDLE or slowed down mode
ENABLE "TAP" (FAST "CLICK" ON MOBILE DEVICES)	Disable this option if you have compatibility issues with some mobile devices. App responsiveness is slow when this option is not enabled.
MINIMUM DELAY FOR BUTTON MODE ON MOBILE (MS)	If the widgets or elements configured in "BUTTON" mode (doing an action when pressed and another when released) don't work properly on specific mobile phones, a delay can be entered here to avoid conflicts with other <i>gestures</i> .
ENABLE LOGIN WITH CLOUD ACCOUNT	Allow you to authenticate in DELÉGO with your cloud account, as well as with local credentials
CHECK INTERNET CONNECTIVITY EVERY (S)	Interval (in seconds) between queries to check the internet connection by the webserver

12.4 Map View settings

This page allows you to set the properties of the GRAPHIC MAP display for rooms/environments. In particular:

MIN. ZOOM [%] MAX. ZOOM [%]	Minimum and maximum limits for the “zoom” if enabled in the edit page of the room.
CONVERT PLANS INTO GRIDS ON SMALL SCREENS	If enabled, this option converts environments with graphic maps into grids. Used for devices with small screens (e.g., smartphones)
MAX. SCREEN WIDTH FOR PLAN TO GRID CONVERSION	If the previous option is enabled, indicate the maximum width in pixels of the device screen. If blank, the system will convert the value automatically.

12.5 Functions view settings

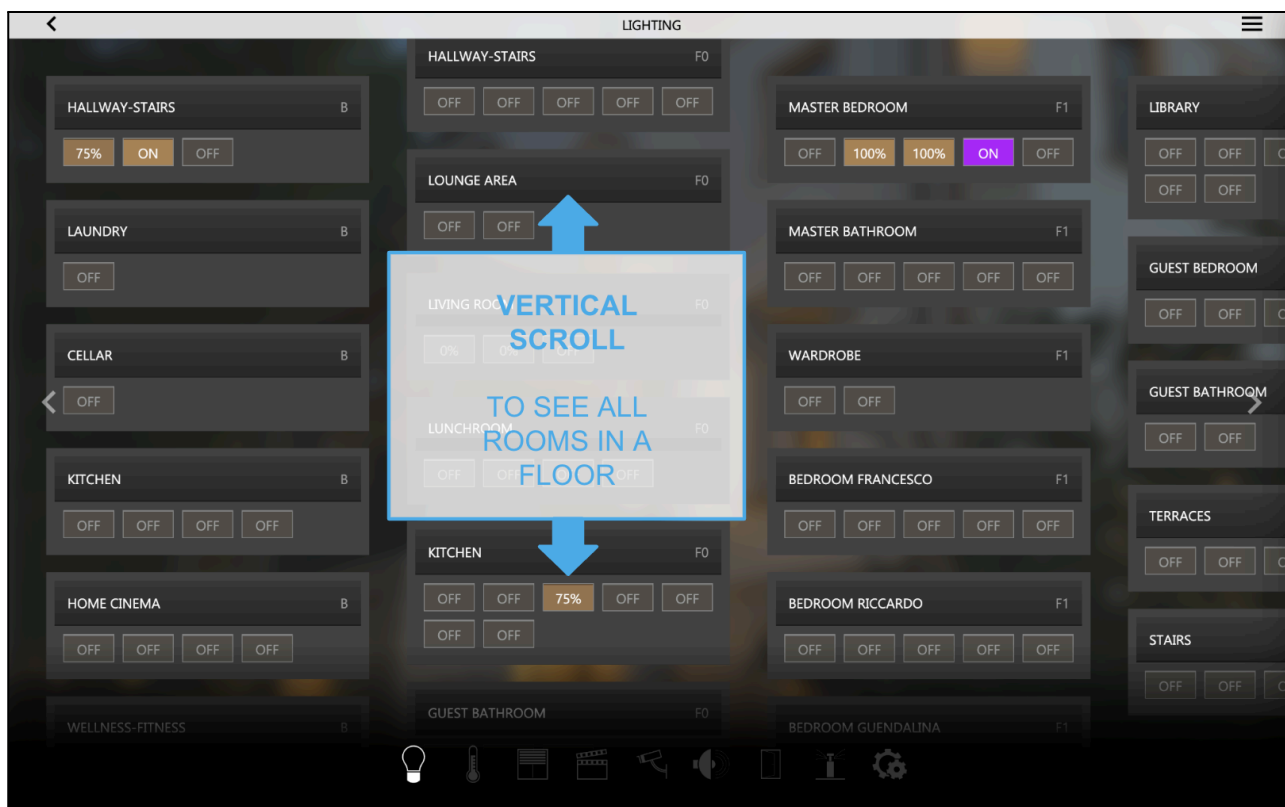
This section allows you to set the display criteria of the elements (e.g., Widgets) in the FUNCTIONS pages that are accessible using the TOOLBAR at the bottom of the HOMEPAGE. There are three criteria available:

- Compact.
- Dynamic.
- By floors.

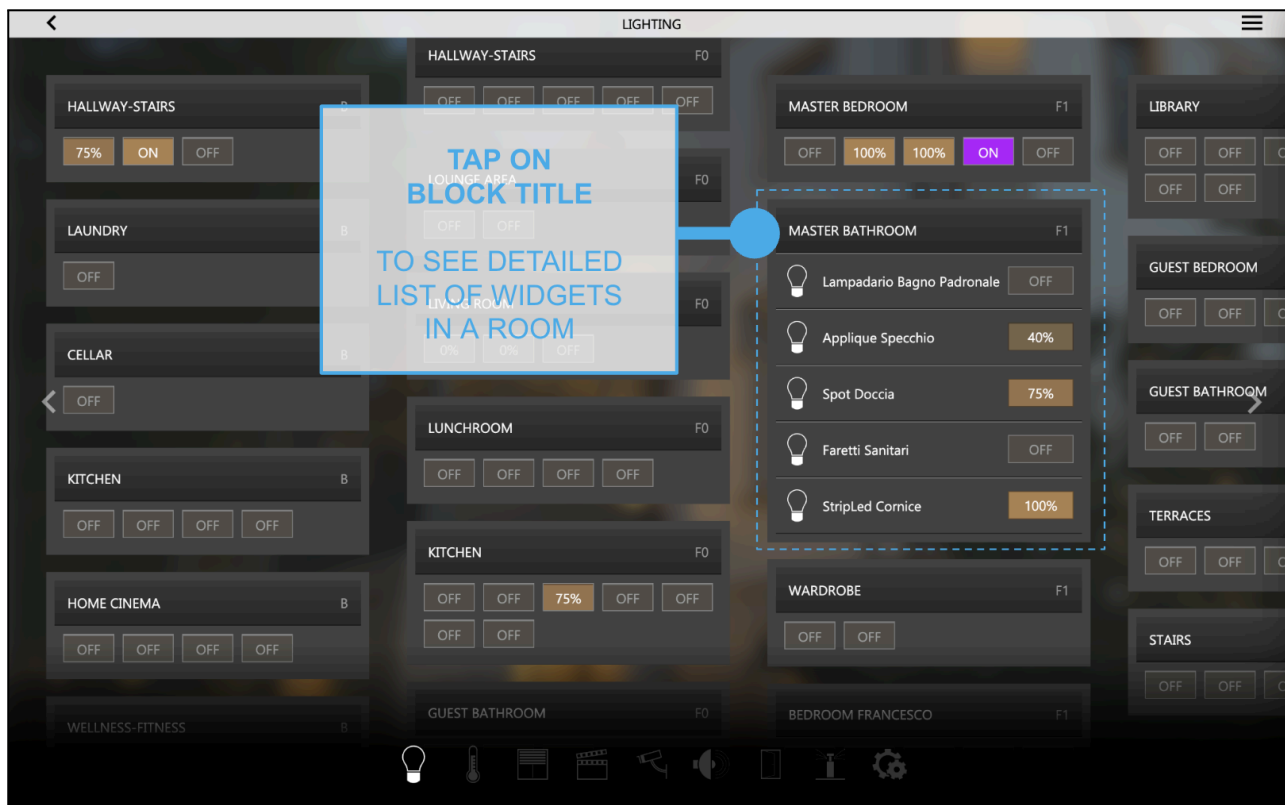
Compact

With this mode, rooms are organized by floors (in various columns) and only the preview of the widget's states are shown. If pressing the previews, it is possible to set a command to the corresponding widget.

With a vertical scroll it is possible to navigate all the rooms of a floor while dragging the horizontal bar of the browser you can access all the floors of the project.

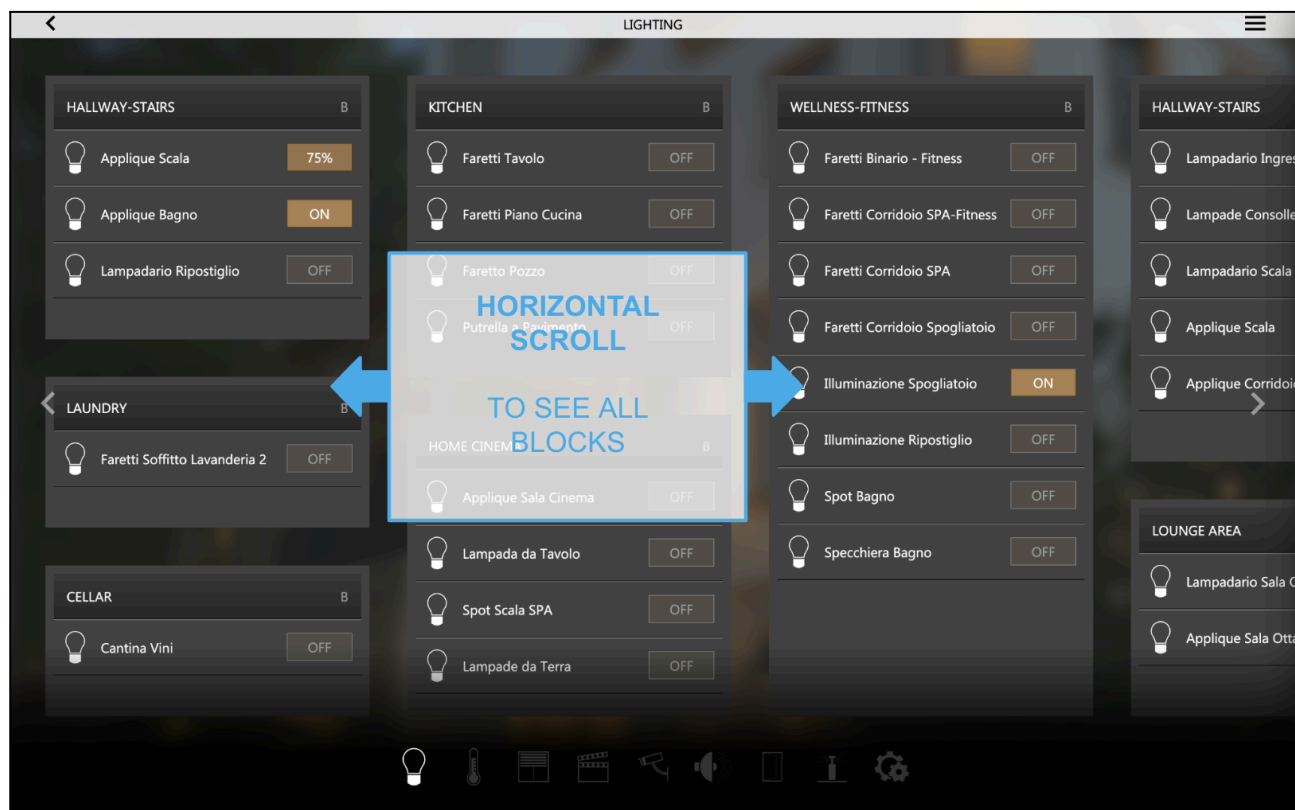


If accessing the room's details, the popup is expanded to show all the widgets present in the room and from this view is possible to access the details and commands available for the widget.



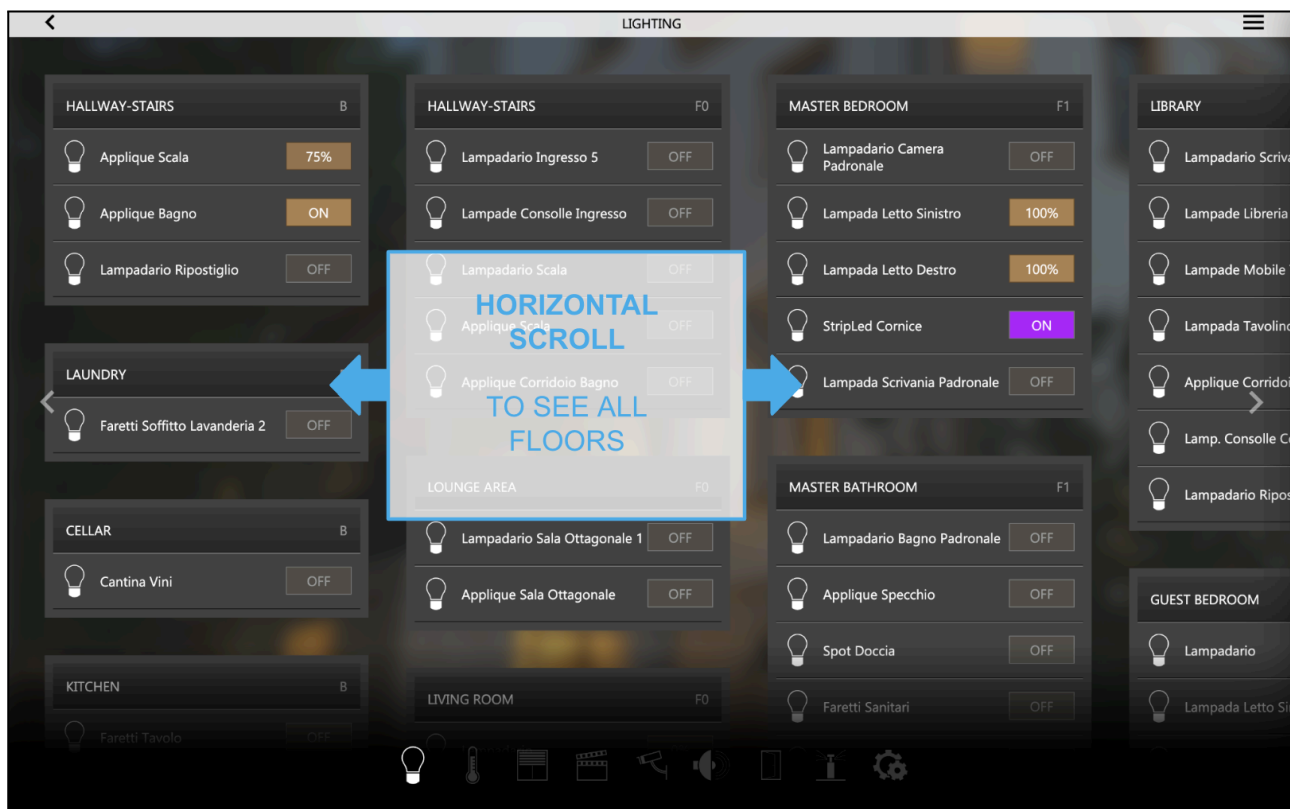
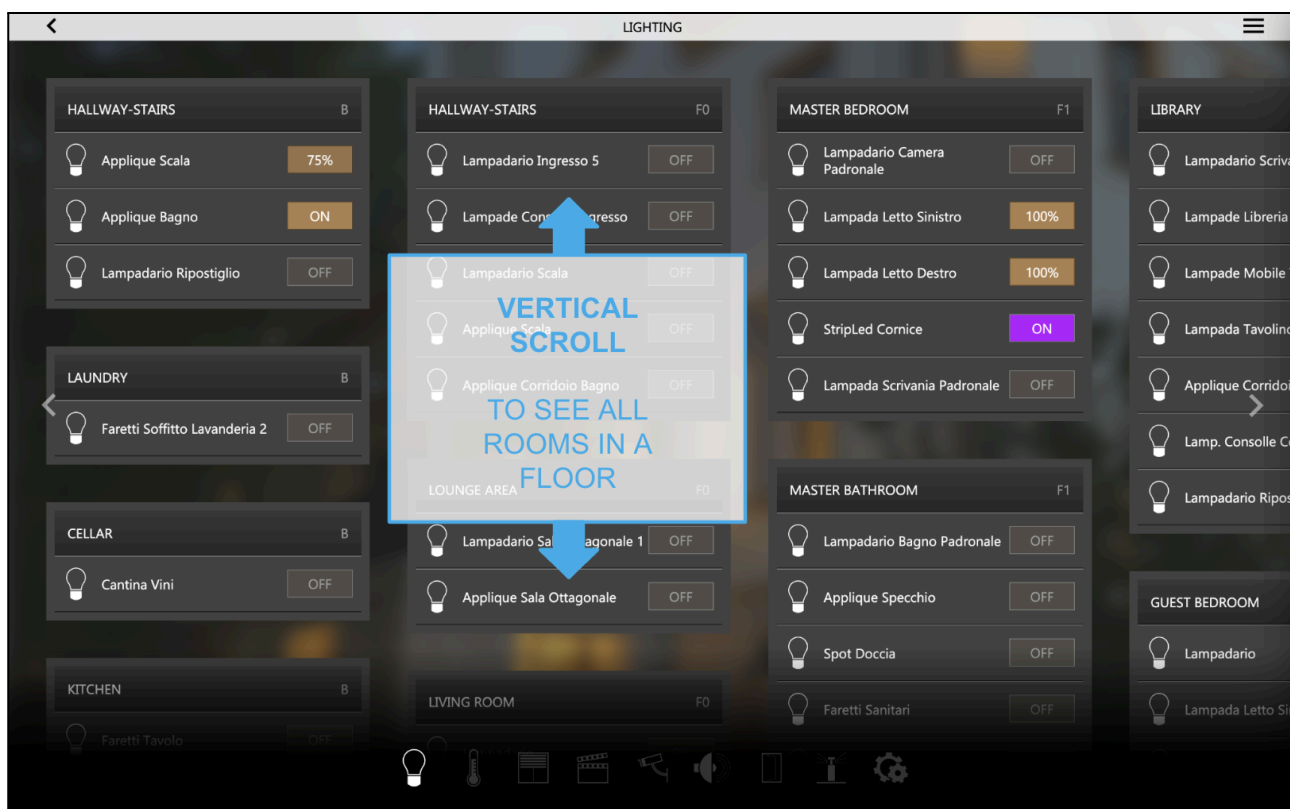
Dynamic

Using dynamic criteria, the system will automatically arrange the rooms to optimize the available space in the window.



Floors

With this representation, the columns represent the floors. By vertical scrolling, it is possible to view all the rooms that belong to a floor.



13 Revision history

The following table contains the most relevant changes in the software releases, concerning the topics of this application manual:

Release	Changes	Date
2.8.0	Added the MATTER BRIDGE functionality	15/04/2026
2.7.0	Adjusted the manual according to the new organization of the Administration View.	11/09/2025
2.6.0	Introduced DHCP as default network configuration (for new servers)	02/04/2025
	Introduced the new “ connections ” section in configuration and related items in advanced functions	
	Introduced links to rooms, external web pages or mobile apps	
	Improved charts visibility on desktop and tablets	
	Introduced cloud backup service	
2.5.2	Schedules customization and conditional enable with the schedule manages	14/02/2025
2.5.1	Coordinates from location in project settings	16/12/2024
2.5.0	Introduced possibility to configure the network in DHCP	30/09/2024
	Introduced new favourites page	
	Added new layouts for the functions page	
	Introduced possibility to customize the graphic library	
	Added new advanced functions (Presence simulation, status byte, repeater, semaphores, system information, clocks)	
2.4.3	Added VPN configuration	22/05/2024
2.4.2	Upgrading to V2.4 server image.2 Added section dedicated to the circadian circle	10/11/2023
2.4.1	Updated integrations available	19/06/2023
	Update with new product codes	30/05/2023
	Upgrading to V2.4.1 server image Added Compact View paragraph General document review	28/04/2023
2.4.0	Upgrading to V2.4.0 server image. Update to new app for mobile devices with advanced management of multiple systems and quick commands	26/09/2022
2.1.3	Update: remote control functions have been eliminated to improve system security; update on generic widgets and voice assistants	02/02/2022
2.1.2	Update on consumption monitor	02/12/2021
2.1.1	Update on load control progress	21/12/2020
2.1.0	Update to DELÉGO software version 2.1.2	05/11/2020
1.0.0	First issue. Update to DELÉGO software version 2.0.0	30/06/2020



Before the software release 2.6 the application manuals of DELÉGO SERVER were organized differently and this application manual contained more arguments that now are in separate manuals.

An exact correspondence with older versions of the manuals and the changelog could not be found for this reason.