

SpaceLogic C-Bus Commission

Help Center

Instructions to use C-Bus devices with SpaceLogic C-Bus Commission software

05/2025

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Safety Information

Important Information

Read these instructions carefully and observe the equipment to become familiar with the device before trying to install, operate, service, or maintain it. The following special messages may appear throughout this manual or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of a symbol to either a “Danger” or “Warning” safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that accompany this symbol to avoid possible injury or death.

DANGER

DANGER indicates a hazardous situation which, if not avoided, **will result in** death or serious injury.

Failure to follow these instructions will result in death or serious injury.

WARNING

WARNING indicates a hazardous situation which, if not avoided, **could result in** death or serious injury.

CAUTION

CAUTION indicates a hazardous situation which, if not avoided, **could result in** minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to physical injury.

Note

Electrical equipment must be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

A qualified person is one who has skills and knowledge related to the construction, installation, and operation of electrical equipment and has received safety training to recognize and avoid the hazards involved.

Safety Precautions

CAUTION

HAZARD OF INCORRECT INFORMATION

- Do not incorrectly configure the software, as this can lead to incorrect reports and/or data results.
- Do not rely solely on software messages and reports to determine if the system is functioning correctly or meeting all applicable standards and requirements.
- Do not rely solely on the software's messages and information for maintenance or service decisions.
- Consider the implications of unanticipated transmission delays or failures of communications links.

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Cyber Security

Windows Updates

NOTICE

POTENTIAL COMPROMISE OF SYSTEM AVAILABILITY, INTEGRITY, AND CONFIDENTIALITY

Apply the latest updates and hotfixes to your Operating System and software.

Failure to follow these instructions can result in cyber security breach and data breach.

Be sure that all Windows updates and hotfixes, especially Windows security updates are regularly applied to machines running SpaceLogic C-Bus Commission Software.

If compatibility issues arise from Windows updates, they are considered as high priority by the SpaceLogic C-Bus Commission Software team. They will be evaluated and resolved to deliver patches to enable the continued use of Windows security updates.

Hardening

Observe the following recommendations to optimize cyber security in a protected environment:

- Harden devices according to your company's policies and standards.
- Apply and maintain the SpaceLogic C-Bus Commission Software security capabilities.
- Use an antivirus software and implement updates for the operating system and Microsoft .NET Framework on the machine dedicated to SpaceLogic C-Bus Commission Software tool.
- Follow user account management tasks as described by your organization or contact your network administrator.

NOTICE

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- Change default passwords to help prevent unauthorized access to settings and information.
- Use Windows Active Directory for user account management and access to network resources.
- Disable unused ports/services and default accounts, where possible, to minimize pathways for malicious attacks.
- Place networked devices behind multiple layers of cyber defenses (such as firewalls, network segmentation, and network intrusion detection and protection).
- Use cyber security best practices (for example: least privilege, separation of duties) to help prevent unauthorized exposure, loss, modification of data and logs, interruption of services, or unintended operation.
- Follow cyber security tasks as described by your organization or contact your network administrator.

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d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

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In recent years, the growing number of networked machines and production plants has seen a corresponding increase in the potential for cyber threats, such as unauthorized access, data breaches, and operational disruptions. You must, therefore, consider all possible cybersecurity measures to help protect assets and systems against such threats.

To help keep your Schneider Electric products secure and protected, it is in your best interest to implement the cybersecurity best practices as described in the [Cybersecurity Best Practices](#) document.

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About the Book

Document Scope

This document describes the process of commissioning C-Bus and DALI devices. It is written for users who are familiar with C-Bus and DALI systems.

Technical Support

For technical support reach out to our Customer Care Team in your location or region. If you have any questions or need more details, see [contact support](#)

Overview

Introduction to SpaceLogic C-Bus

SpaceLogic C-Bus is a lighting and building automation system in a commercial or residential building. It allows the user to manage lights, shutters, temperature, security and energy usage.

In this document, the term 'software' refers to the "SpaceLogic C-Bus Commission" software.

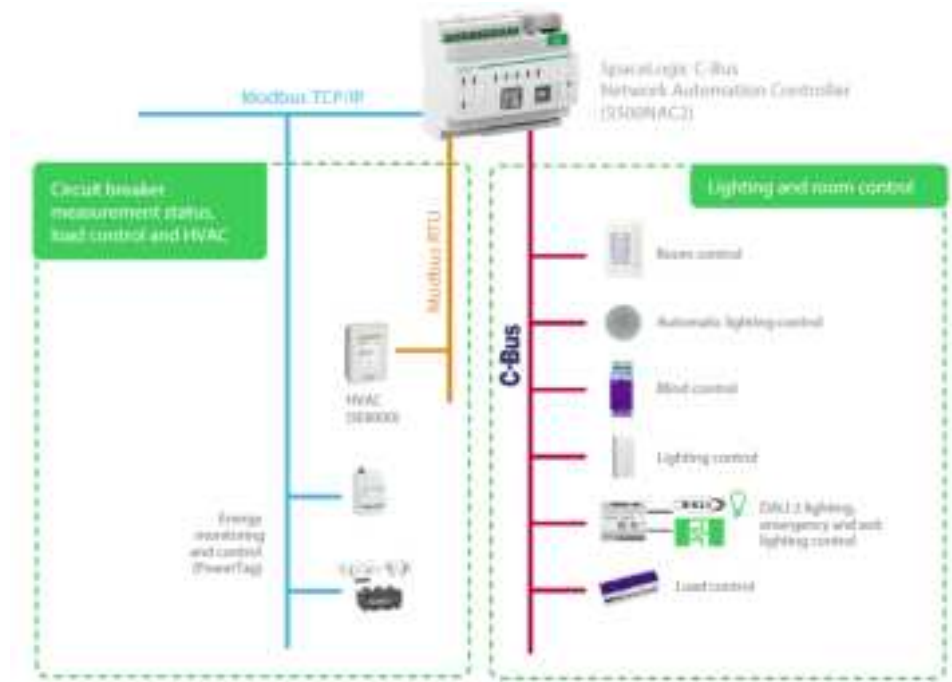
C-Bus Architecture

The C-Bus architecture includes some important components:

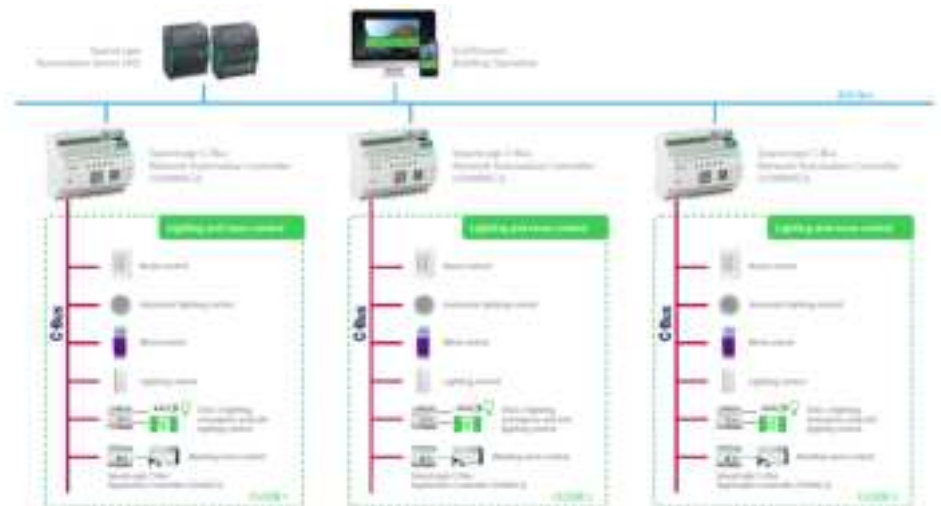
- A messaging protocol that connects building automation applications
- A large set of units which can send and receive one or more building automation applications
- Addressing protocols that identify units, building automation applications, and networks uniquely
- A set of bridges and gateways which allow the transmission of C-Bus messages across C-Bus networks
- A peripheral interface unit (PCI) which transmits configuration information between SpaceLogic C-Bus commission, which is the C-Bus network configuration utility, and C-Bus networks

C-Bus system Architecture for Commercial Buildings

Small Commercial Buildings

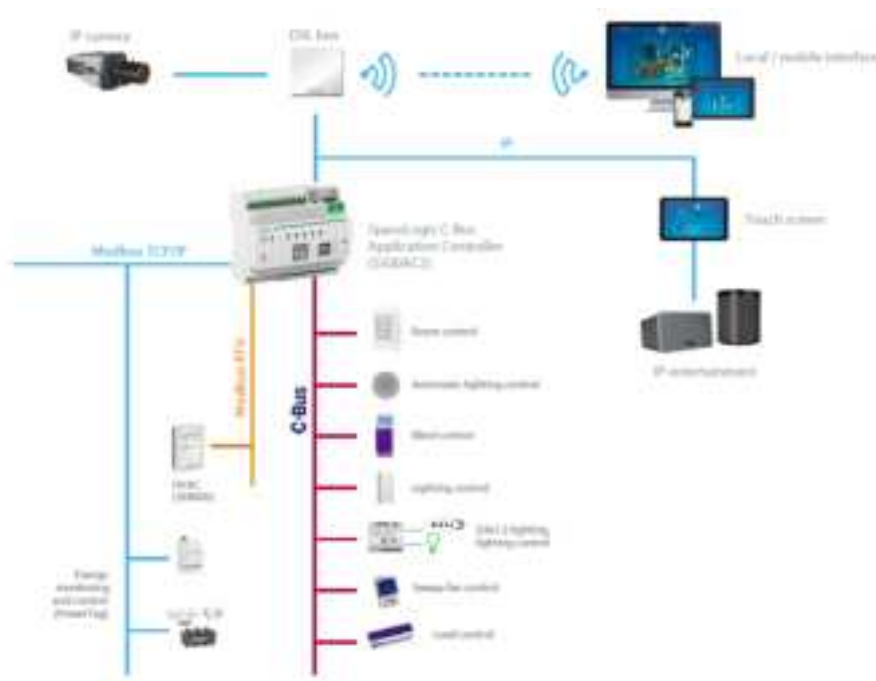


Large Commercial Buildings

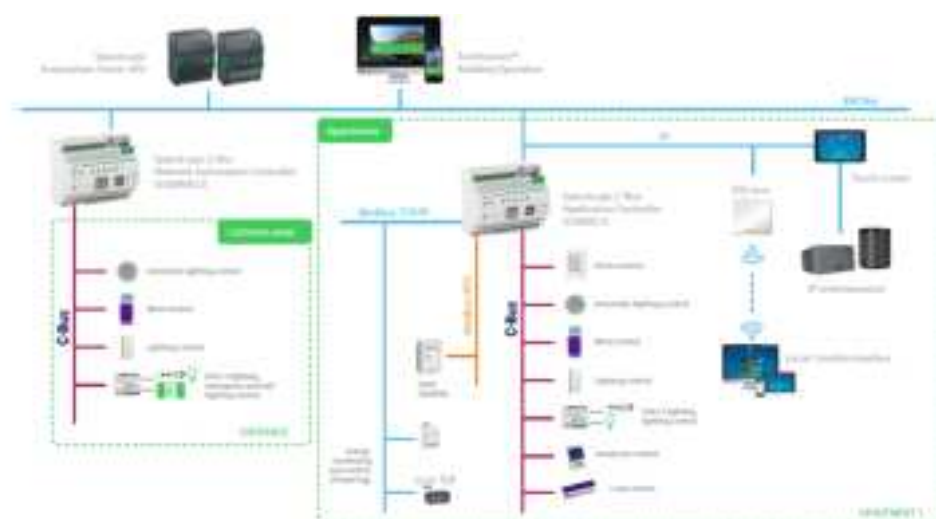


C-Bus system Architecture for Residential Buildings

Single Dwelling Residential Buildings



Multi-Dwelling Residential Buildings



Introduction to SpaceLogic C-Bus Commission

The SpaceLogic C-Bus Commission is a single software tool for designing and commissioning C-Bus and DALI systems, including lighting and emergency lighting applications.

The SpaceLogic C-Bus consists of:

1. Input Devices – Wall plates, Touch panels, Sensors and General interfaces
2. Output Devices – Dimmers, Relays, and Gateways
3. System Devices – Controllers, Interfaces and Bridges
4. Software – For Commissioning and control of devices

The features of the software are as follows:

- Managing C-Bus and DALI devices over single C-Bus network connection

- Defines relation between C-Bus and DALI from a single point
- Deployment queue enables background deployment while configuration is work in progress.
- Provides different DALI device identification methods suitable for varying deployment situations

C-Bus Applications

The C-Bus building automation applications are at the core of the C-Bus architecture. Each applications are defined to :

- Suit a specific building automation activity
- Provide direct or indirect control or integration with electrical load control
- Provide a messaging protocol specific to the type of building automation
- Communicate building automation information between units or peripherals

Lighting Application

The *Lighting* applications are used to control lighting as well as switching and load control. Lighting types are broken down into three groups.

- Lighting Compatible applications such as heating, ventilation, HVAC Actuator, irrigation control, etc. These are applications which are fully compatible with the Lighting application, but have unique application addresses in order to separate differing customer solutions
- Lighting Based applications such as trigger, for supporting the creating of scenes and remote triggering and enable, enabling/disabling various system functions
- Lighting Type applications utilize the same set of C-Bus messages, which are designed to transmit electrical load control information across the C-Bus network

Lighting and Lighting Compatible applications are responsible for controlling electrical loads for a wide range of automation operations. These are the applications which form the basics of most C-Bus building automation.

For more details [Click here](#), page 128

Trigger Application

The *Trigger* application is used to trigger actions or events such as lighting scenes or to start an irrigation program.

For more details [Click here](#), page 139

Enable Application

The *Enable* application is used to enable/disable system functions. The application is capable of enabling and disabling functions such as:

- Schedules
- Irrigation controller
- Keys with keysets on C-Bus wireless input/output units
- Customer solutions can be enabled/disabled. Each application has 255 *Enable Group* address which can be used to enable/disable a range of functions and each of these have 255 *Values*

For more details [Click here](#), page 147

Error Application

The *Error* application is used to report error information detected or generated by C-Bus units over the C-Bus network.

C-Bus units monitor and detect error conditions, and report those conditions using the C-Bus error application.

An error or fault condition report contains information about what caused it, how severe it was, and what its nature was. Events are reported OK, if the monitored events are operating normally. Upon receiving an error message, a device acts on the information accordingly.

For more details [Click here, page 154](#)

Measurement Application

The *Measurement* application is designed to receive data in the form of voltage, current and resistance, which is converted, scaled and, then transmitted across the C-Bus to accurately represent physical measurement units such as temperature, liquid level, light level and so on.

For more details [Click here, page 161](#)

Emergency Exit Light Application

The *Emergency Exit Light* application is used for emergency and exit lighting.

For more details [Click here, page 165](#)

Audio Application

The *Audio Control* application control the audio levels such as volume, bass, and treble as well as the selection of audio sources for zones.

For more details [Click here, page 173](#)

Media Transport Application

The *Media Transport Control* application is designed to transmit control signals for audio and video equipment used with C-Bus units.

For more details [Click here, page 177](#)

Knowing the User Interface

Outline

The home screen of SpaceLogic C-Bus Commission Software after the installation is as below:



Customizing the User Interface Layout

You can customize the appearance of the commission software User Interface by modifying the layout of windows . You can modify their size and also their position.

- Windows can be arranged:
 - Pinned
 - Docked
 - Floating on multiple monitors

The customized layout is saved when you close the commission software.

TIP: To get the default setting, see [Reset window layout](#)

The following demonstrates an example of a customized User Interface layout.



Each Window consists of following control buttons:

Button	Description
	Drop-down options • Float • Dock • Dock as document • Auto hide • Close
	Auto hide
	Close the window

Software Update

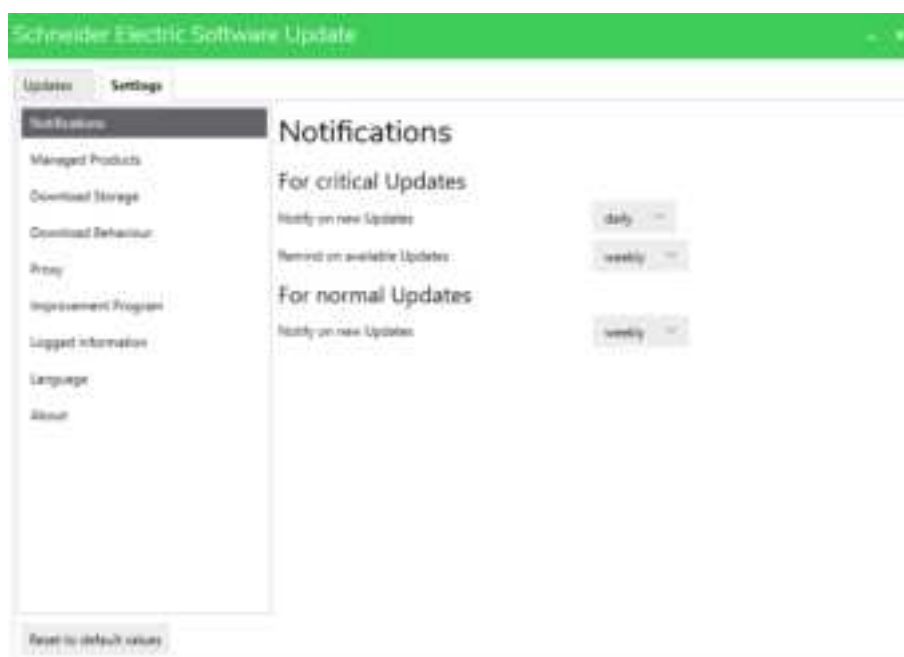
The software update feature enables the use of the most up-to-date software, minimizing downtime/disruptions when commissioning projects. This ensures smooth and efficient operation. Additionally, it also:

- Sends automatic notifications about new software updates/versions.
- Allows you to install the latest updates for the SpaceLogic Commissioning Software (SLCC) application by integrating with the Schneider Electric **Software Update** (SESU) platform.
- Prevents user from clicking the incorrect link on the Schneider Electric website.

To install the software update feature:



1. Double click the **Software Update** icon. The **Schneider Electric Software Update** (SESU) application appears.



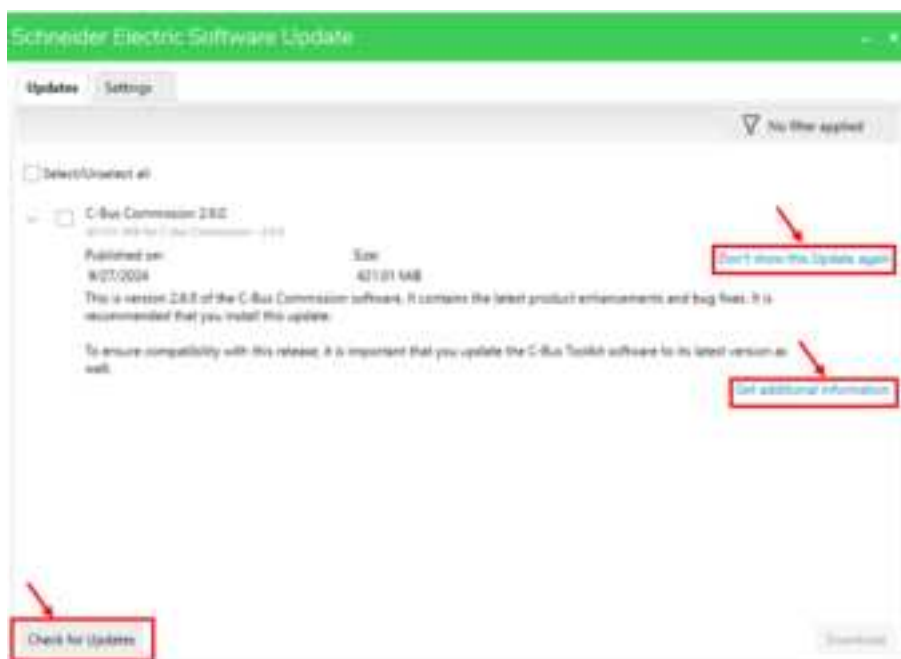
2. Click the **Settings** tab. The **Notifications** section is displayed.

NOTE: You can only view the frequency of notifications to be received.

- **For critical Updates:** Weekly reminders on available updates and daily notifications on new updates.
- **For normal Updates:** Weekly notifications on new updates.

- Click the **Updates** tab. The SESU application displays all the relevant updates. In case, you missed the updates, click **Check for Updates**.

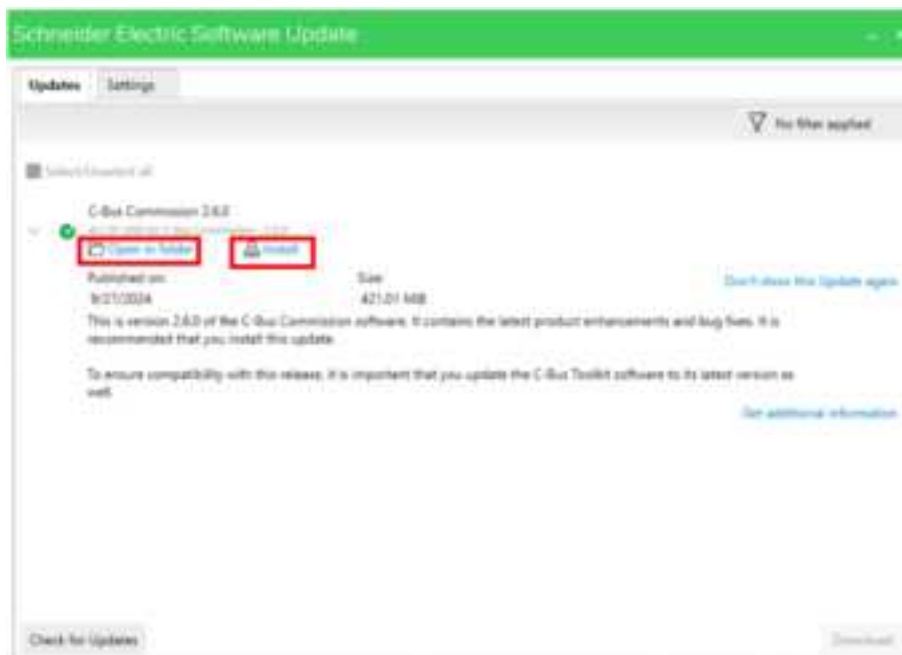
NOTE: Click **Don't show this Update again**, to prevent updates from appearing. For more information on the SpaceLogic C-Bus application, click **Get additional information**.



- To download the new software update, either:
 - Select one or more update and then click **Download**.
 - or,
 - Select the **Select/Unselect all** checkbox to select all the updates and then click **Download**. The new update starts to download.



5. Once the download is completed, the below screen is displayed.



6. You can either open the directory containing the downloaded file or directly click **Install** to initiate the installation process. The new updates will be installed.

Workflow of the software

A C-Bus and DALI installation can be programmed in various methods. The workflow defines a possible procedure.

1. Create a new project and fill in the project information in the required fields, see [Create project](#)

2. Create and add networks as per project requirement, see [Add networks](#)

NOTE: Each project can have a maximum of 255 networks.

3. Add devices to the network from Library window, see [Library Window](#), page 64

NOTE: If C-Bus DALI-2 Gateway has been added to the project, the DALI devices must be added into the DALI lines.

4. Create applications, see [Add applications](#), page 121

5. Add group address information to applications from C-Bus Application section.

6. Set properties for the devices using the Properties window, see [Properties window](#), page 117

7. Open and scan the C-Bus network and the DALI line if required, see [Network Devices](#), page 76

Result: The software searches for the devices in the network.

8. Identify the DALI-2 devices in the network using Auto Identify or Identify functions.

NOTE: If the C-Bus devices are already addressed, then this step is not required. Verify the flashing lights in the physical device.

9. Extract the fully matching devices from *Network Devices* to *Devices in Project* section, see [Extract devices](#), page 82

10. Deploy each configured/reconciled device to the network, see [Deploy device to network](#), page 74

Result: The device information is displayed in the Deployment Queue window.

Menu

The ☰ will display all the options available in the SpaceLogic C-Bus commission software. The menu consists of:

- Projects, page 32
- Firmware, page 32
- Setting, page 44
- About, page 48
- Exit, page 49

Projects

The **Projects** section in the settings displays the project dashboard as shown below:



You can perform the following:

1. Create new project.
2. Open, rename and delete an existing project using ⋮.
3. Search existing project.
4. Switch between projects.
5. Sort projects.
6. Import projects.

For more details, see [Project management](#), page 50.

Firmware

Prerequisites: Make sure you have the SpaceLogic C-Bus Commission software open. Connect the C-Bus unit to your PC using the appropriate USB cable.

The **Firmware** section enables you to easily update the firmware of your C-Bus units. The necessary firmware files for the update process are available within the software.

To upgrade the firmware :

1. Click ☰.

2. Click **Firmware**.

NOTE: When no devices are connected, the **Firmware** upgrade page is displayed with **Refresh** icon enabled and **Upgrade** disabled.

3. Connect a Unit device and click **Refresh**. Once devices are detected, **Upgrade** is enabled.

- Click the **Firmware to Upload** drop-down menu to change the firmware version of any connected device.



IMPORTANT:

- User can upgrade only one device of the same type at a time. For example, one DALI 2 Gateway at a time out of two DALI-2 Gateways.



- User can upgrade multiple devices of different type at a time. For example, one Key Input device and one Digital Dimmer.



- Click **Upgrade**.

For product specific firmware upgrade, refer Unit type firmware upgrade, page 35.

Unit Firmware Upgrade

SpaceLogic C-Bus Firmware Upgrade

This section describes how to update the firmware for devices using normal and bootloader modes.

Firmware Update for Devices Connected in Normal Mode

The following procedure is applicable for the below listed SpaceLogic C-Bus units.

- DALI-2 Gateway
- Digital Dimmers
- High Power Dimmers
- Key Input Unit
- Relays

Prerequisites: For more details, refer the SpaceLogic C-Bus product instructions.

To update the firmware using normal mode:

1. Connect the unit to the system through an appropriate USB cable.
2. Click .
3. Click **Firmware**.
4. Select the unit (Key Input/Relay/Digital Dimmer/High Power Dimmer/DALI-2 Gateway).

5. Select the firmware version to upgrade, from the **Firmware to Upload** drop-down menu.
 - At a time, only one device can be selected for firmware upgrade.



- Only one unit type (Example: If multiple DALI-2 Gateway devices are connected, other devices of the same unit type must be disconnected, except for the unit that requires an upgrade).

Upgrade is disabled when two same unit types (Example: Two DALI-2 Gateways/Dimmers/Key Input) are connected.



- If any of the devices listed in the above SpaceLogic C-Bus units is in bootloader mode, the below error message is displayed.

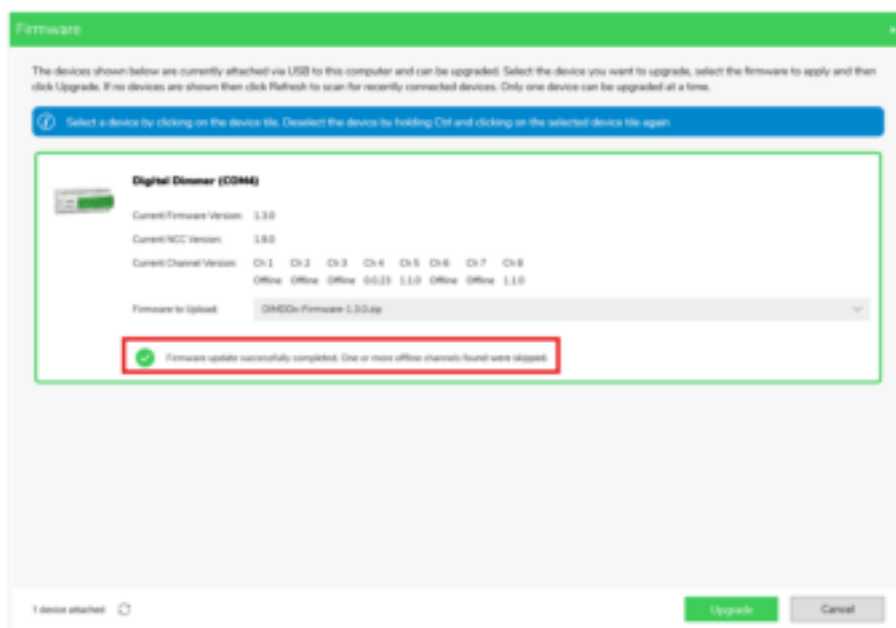


IMPORTANT: DO NOT close the application or switch between views while the unit firmware upgrade is in progress, as this may cause the application to stop abruptly.

6. Click **Upgrade**.



7. Once the upgrade is completed, success message is displayed.



IMPORTANT:

For Dimmers

- The firmware upgrade process also updates the dimmer core firmware version for each channel, if required.
- Each channel and unit indicator blinks when respective channel upgrade is in-progress. Once the channel upgrade is completed, the channel indicator turns green.

eDLT Wall Plates Firmware Upgrade

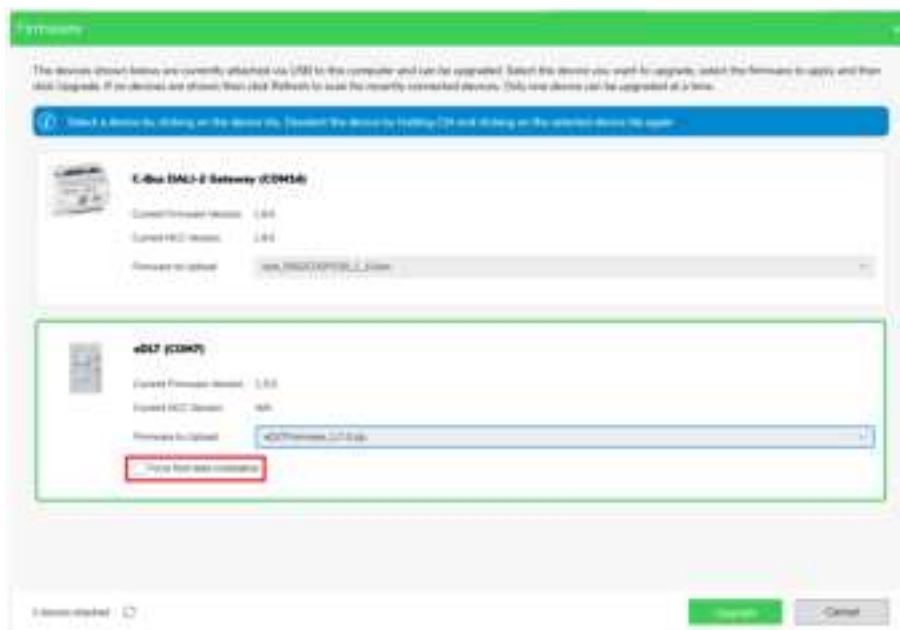
Prerequisites: For more details, refer the SpaceLogic C-Bus product instructions.

To update the firmware for eDLT Wall Plates:

1. Connect the eDLT unit to the system through an appropriate USB cable.
2. Click .
3. Click **Firmware**.
4. Select the eDLT unit.
5. Select the firmware to upgrade, from the **Firmware to Upload** drop-down menu.

NOTE: An additional option, **Force font data installation** is available only for eDLT units, by default it is unchecked.

6. Select the checkbox to install the latest eDLT font file along with the firmware upgrade.



IMPORTANT: DO NOT close the application or switch between views while the unit firmware upgrade is in-progress, as this may cause the application to stop abruptly.

7. Click **Upgrade**. Once the upgrade is completed, success message is displayed.

NOTE: Only one eDLT can be upgraded at a time. **Upgrade** is disabled, when two eDLT units are connected.

Firmware Update for Devices Connected in Bootloader Mode

Sometimes, during the firmware upgrade process, the files may fail to work, the device cable may be unplugged, or the device may fail to switch to normal mode. In such cases, the device remains in the bootloader mode. The following procedure is applicable only for the below listed NCC SpaceLogic C-Bus units:

- Digital Dimmers
- High Power Dimmers
- Key Input Unit
- Relays

Additionally, the user:

- Does not need to power cycle the device.
- Does not believe that the device is faulty.
- Can easily and quickly restart the upgrade operation.

Prerequisites: For more details, check the SpaceLogic C-Bus product instructions.

To update the firmware for devices in bootloader mode:

1. Connect the unit to the system through an appropriate USB cable.
2. Click .
3. Click **Firmware**.
4. Select the unit (Key Input/Relay/Digital Dimmer/High Power Dimmer).

- Select the firmware to upgrade, from the **Firmware to Upload** drop-down menu.



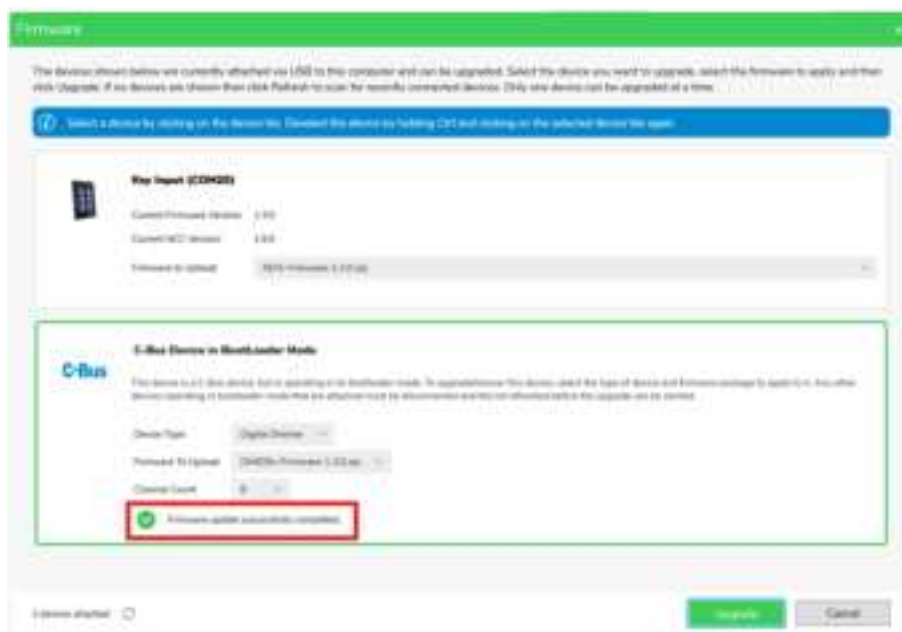
NOTE: The **Channel Count** drop-down list is applicable only for Relays and Dimmers.

IMPORTANT: DO NOT close the application or switch between views while the unit firmware upgrade is in-progress, as this may cause the application to stop abruptly.

- Click **Upgrade**.



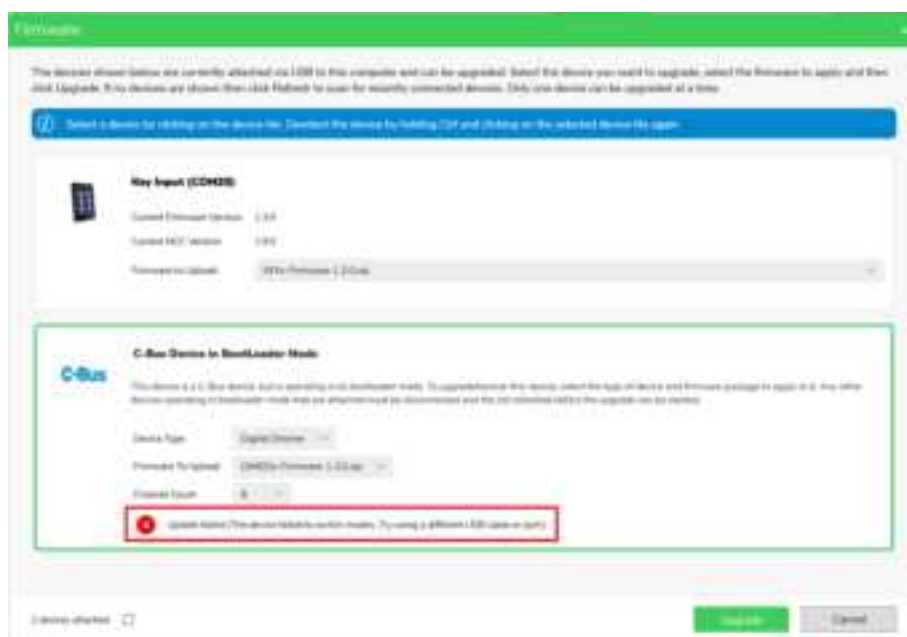
- Once the upgrade is completed, success message is displayed.



- Click the **Refresh** icon, the bootloader device tile is replaced with a normal device tile indicating the device is a Digital Dimmer.



9. If the connected device fails to switch modes, the below error message is displayed.



10. If the connected device is not found, the below error message is displayed.



Optimizing the Firmware Update Efficiency for C-Bus Digital Dimmers/High Power Dimmers

If the binary files are already present on the dimmer device, the software will not upload them again when initiating the firmware update process.

When the firmware update process of a dimmer device begins, the software checks the NCC firmware version and each channel's firmware version. If they match the firmware package, the binary files will not be uploaded.

Additionally, it also:

- Reduces the firmware update time for dimmers by excluding unnecessary NCC firmware and the channel firmware version updates.
 - If the NCC and Channel firmware files are already on the dimmer, skip uploading them.
 - If the NCC and Channel firmware versions are same on the device, skip the upload phase.
- Enables the firmware update process to complete successfully even if a channel bank is unpowered.
- Bypasses the unpowered channel bank to complete the update, upon user confirmation.

To update the firmware efficiency for C-Bus Digital Dimmer/High Power Dimmer devices:

1. Connect the unit to the system through an appropriate USB cable.
2. Click .
3. Click **Firmware**.
4. Select the unit (Digital Dimmer).
5. Select the firmware to upgrade, from the **Firmware to Upload** drop-down menu.



IMPORTANT: DO NOT close the application or switch between views while the unit firmware upgrade is in-progress, as this may cause the application to stop abruptly.

6. Click **Upgrade**. A **Confirmation** pop-up appears.



7. Click **Yes** to proceed.



8. Once the upgrade is completed, success message is displayed.



Settings

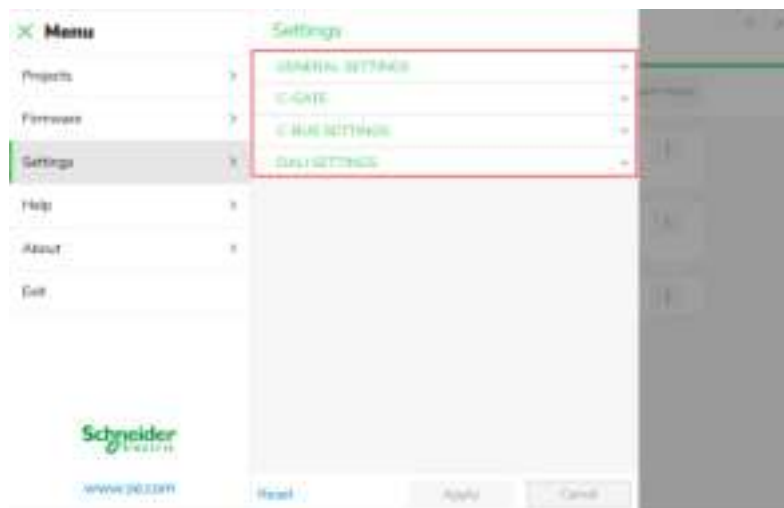
The Settings option allows a user to perform general settings for the software, C-Bus and DALI system. The sections in the *Settings* option are follows:

- General settings, page 45
- C-Gate (To be implemented)
- C-Bus settings, page 48
- DALI settings , page 47

To Open Settings

1. Click 

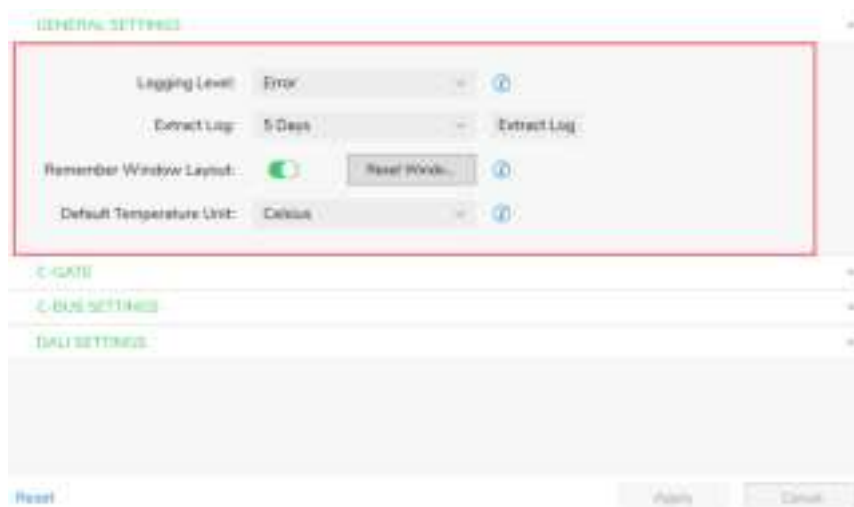
2. Select Settings.



General Settings

The operations that can be performed in the *General Settings* section are as follows:

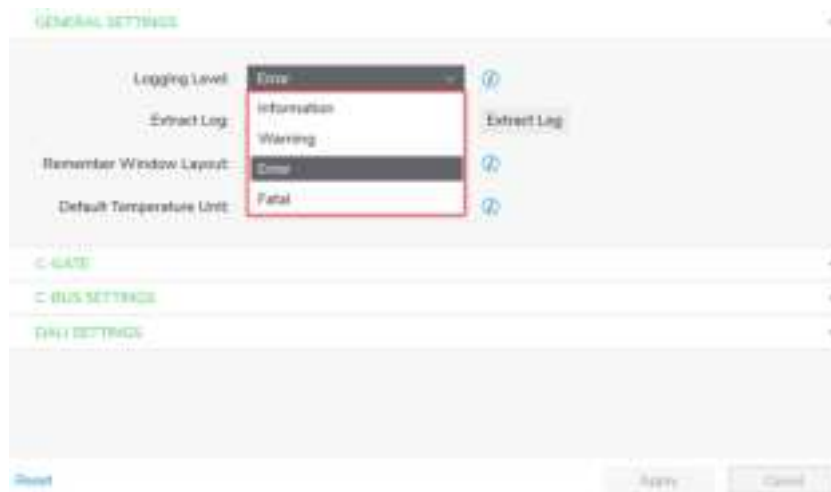
- Logging Level
- Extract Log
- Remember Window Layout
- Default Temperature Unit



Logging Level

Based on the different *Logging Levels* the client and server logs can be extracted. When a logging level is set, it becomes the new default setting and any lower levels are automatically included in the extracted report.

For example: If the Information level is selected, it includes the Warning, Error and the Fatal levels. This feature might be helpful for the debugging purposes.

**NOTE:**

- Click **Apply** to make the selected *Logging Level* as a user-defined
- Click **Reset** to change the Logging level to the system default, which is the Information logging level

Confirm **Yes** in the **Confirmation** dialog box.

Logging levels	Purpose	Description
Error	This is a default level and can be used in general day to day usages	This logging level is helpful when an error occurs in the software NOTE: This is the default level set in the software
Warning	This level is used based on the need to check any warnings generated	This logging level includes any warnings generated during the configuration
Information	This level is used to capture more information details in the Client logs	This logging level includes the login and session information
Fatal	This level is used based on the need to trace a software crash	This logging level is helpful when the software crashes

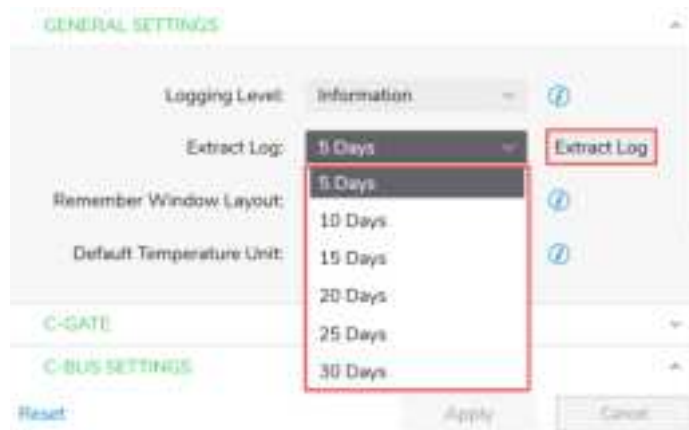
Extract Log

The log events of C-Bus Commission and C-Gate can be extracted using *Extract Log* button.

Name	Type	Compressed size	Released (s)	Size	Ratio	Date modified
CBus-Commission.2021-09-12	JSON File	201 KB	No	13.7 KB	6%	2021/09/12 10:52 AM
CBus-Commission.2021-09-11	JSON File	30 KB	No	844 KB	3%	2021/09/11 10:52 AM
CBus-Commission.2021-09-14	JSON File	20 KB	No	214 KB	3%	2021/09/14 10:52 AM
CBus-Commission.2021-09-21	JSON File	4 KB	No	12 KB	1%	2021/09/21 10:52 AM
C-Gate Log Extract-20 Days.2021	Compressed (zip) File	25,115 KB	No	25,204 KB	23%	2021/09/21 10:52 AM

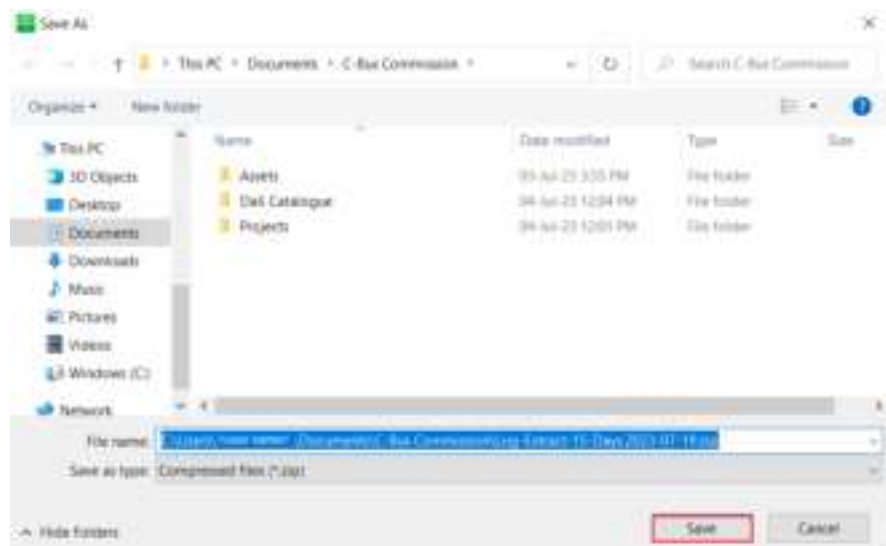
The steps to extract logs for the specified logging level is as explained below:

1. Select the number of days for which the Log has to be extracted and click **Extract Log**



NOTE: The number of days selected will not be saved in the general settings and is only used to extract log.

2. “**Save As**” window is displayed



NOTE: The details are saved in zip file.

Click **Save**

Window Layout

Remember Window layout

Toggle ON, to remember the user-defined layout.

Reset Window layout

To reset the system default setting as windows layout, click **Reset Window Layout**

Temperature Unit

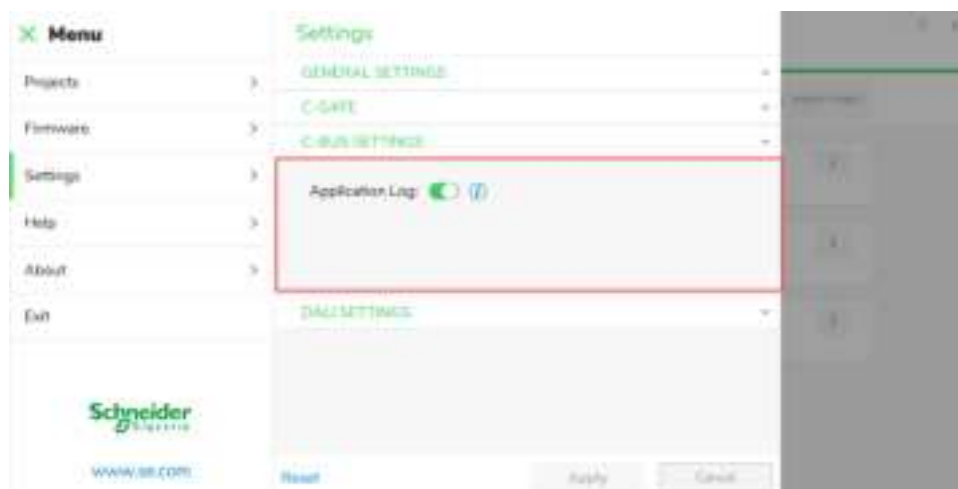
The Default Temperature unit can be set either as Celsius or Fahrenheit.

C-Gate Options

To be implemented.

C-Bus Settings

The operations that can be performed in the General Settings section are as follows:



Application Log

The Application Log allows the user to display group activity on the physical network. By default, the application log is toggled ON.

DALI Settings

DALI SETTINGS can be performed by toggling on **Reconcile Moves Short Address (of Devices in Project)**.

- While performing reconciliation on DALI devices:
 - If the DALI settings is toggled off, the short address and object Id of a device in **Devices in Project** section will not be changed.
 - If the DALI settings is toggled on, the short address and object Id of a device in **Line Devices** section will not be changed.
- Select the option from the **DALI Device (Line Device) toggle button behaviour** drop-down.



NOTE: This setting changes the behavior of the toggle off/on button in the DALI **Line Device** section, making it switch between **Off/On at Max Level** and **On at Min Level/On at Max Level** when toggled.

About

The About option displays the version number of the SpaceLogic C-Bus Commission software, which can be helpful during communicating with the technical support team.

Exit

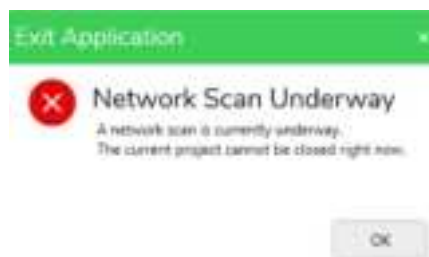
The Exit option allows to exit from the SpaceLogic C-Bus Commission software.

IMPORTANT:

- Trying to exit a software while deployment activities are in progress is not possible.



- Trying to exit a software while scanning is in progress is not possible.



Projects Management

The management of projects consists of operations that can be performed on projects individually in the software.

The projects tool bar in the project home screen include project name.

Operations performed on project screen.

Icons	Operation
	Close the current project, see Close project, page 53
Windows 	Windows Drop-down menu, see Overview of Project space, page 58

Operations performed on projects dashboard:

- Create a project, page 50
- Switch projects, page 51
- Open an existing project, page 52
- Rename a project, page 52
- Search a project, page 52
- Sort projects, page 57
- Import projects, page 53
- Export projects, page 54
- Close a project, page 53
- Delete a project, page 53

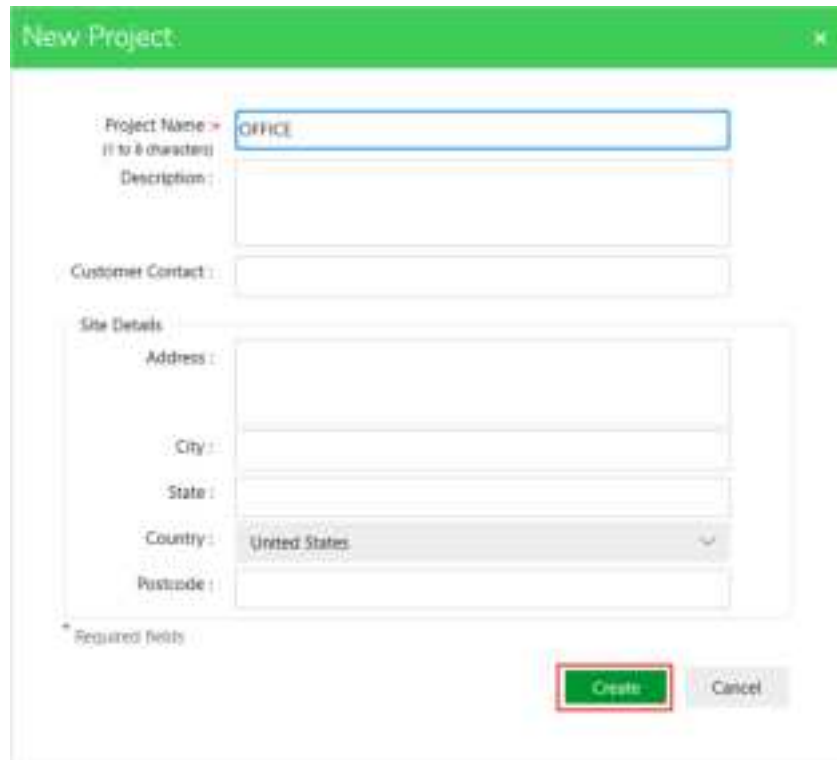
Create a Project

Prerequisites: The SpaceLogic C-Bus Software must be opened.

To create a new project, either in the **Projects dashboard** or in the  , Click



New Project dialog box is displayed. Enter the required information about the project.



A new project is created

Switch Projects

Prerequisites: More than one project must already be created.

SpaceLogic C-Bus Commission software allows you to switch between the projects.

1. Click  in the projects dashboard.
2. Click  of the individual project to be switched.
3. Select **Open**.
4. Confirm **Yes** in the **Confirmation** dialog box.

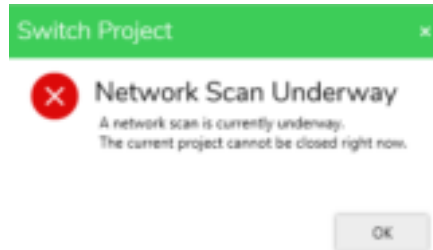
Step result: Your selected project is opened.

IMPORTANT:

- Trying to switch a project while deployment activities are in progress is not possible.



- Trying to switch a project while scanning is in progress is not possible.



Open an Existing Project

Prerequisites: The project must already be created.

1. Click  in the projects dashboard.
2. Click  of the individual project to be opened.
3. Select **Open**.
4. Confirm **Yes** in the **Confirmation** dialog box.

Rename a Project

Prerequisites: The project must already be created.

SpaceLogic C-Bus Commission software allows you to Rename an Existing project.

1. Click  in the projects dashboard.
2. Click  of the individual project to be renamed.
3. Select **Rename**
4. Confirm **Yes** in the **Confirmation** dialog box.

Search a Project

Prerequisites: The project must already be created.

SpaceLogic C-Bus Commission software allows you to search existing projects.

1. Click 
2. In the Project section, enter the name of the project in the **Search** bar.
3. The Project matching the search criteria is listed in the **Projects dashboard**.

4. Select the project and click 
5. Select **Open**.

Close a Project

Prerequisites: The project must already be opened.

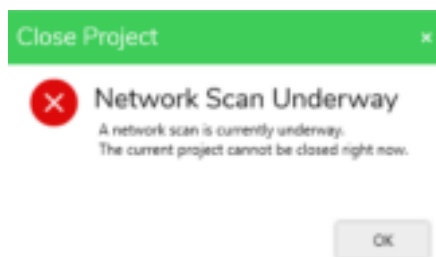
In the Projects tool bar, Click  to close a current project.

IMPORTANT:

- Trying to close a project while deployment activities are in progress is not possible.



- Trying to close a project while scanning is in progress is not possible.



Delete a Project

Prerequisites: The project must already be created.

SpaceLogic C-Bus Commission software allows you to switch between the projects. The Delete Project function deletes a project from the database of the SpaceLogic C-Bus Commission Software.

1. Click  in Projects dashboard, click  of the project to be deleted from database.
2. Select **Delete**.
3. Confirm **Yes** in the **Confirmation** dialog box.

Import Projects

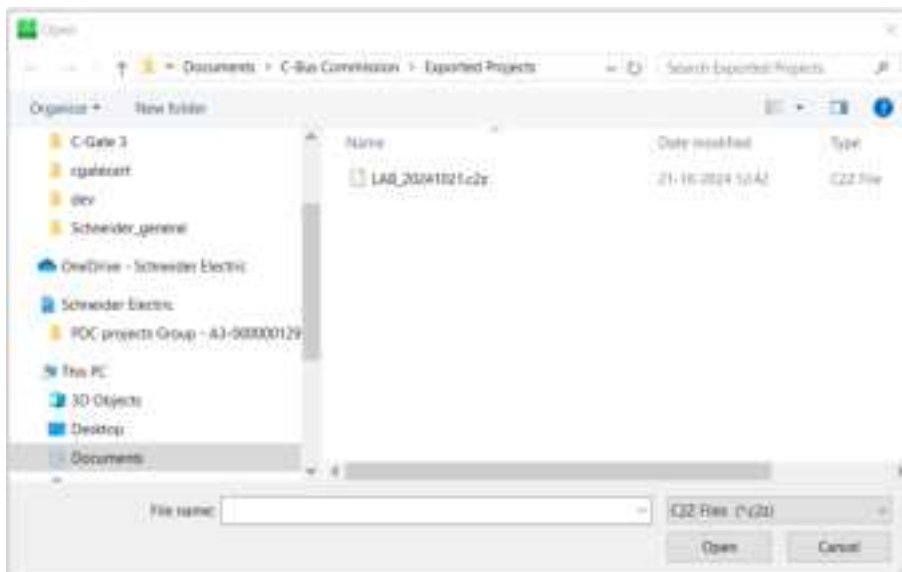
SpaceLogic C-Bus Commission software allows to import projects and all associated files into the software.

The Import function is available in the welcome screen of the software and in the .

To import projects:

1. Click **Import Project**.

- Windows file browser dialogue is displayed with default location proposed C:\Users\<UserName>\Documents\C-Bus Commission\Exported Projects



- Select the project which needs to be imported.

All the associated project files will be imported (like project file, the eDLT/DLT, BMP and Index TXT files, and so on).



The project files are successfully imported to the software.

Export Projects

Prerequisites: The project must be closed before being exported.

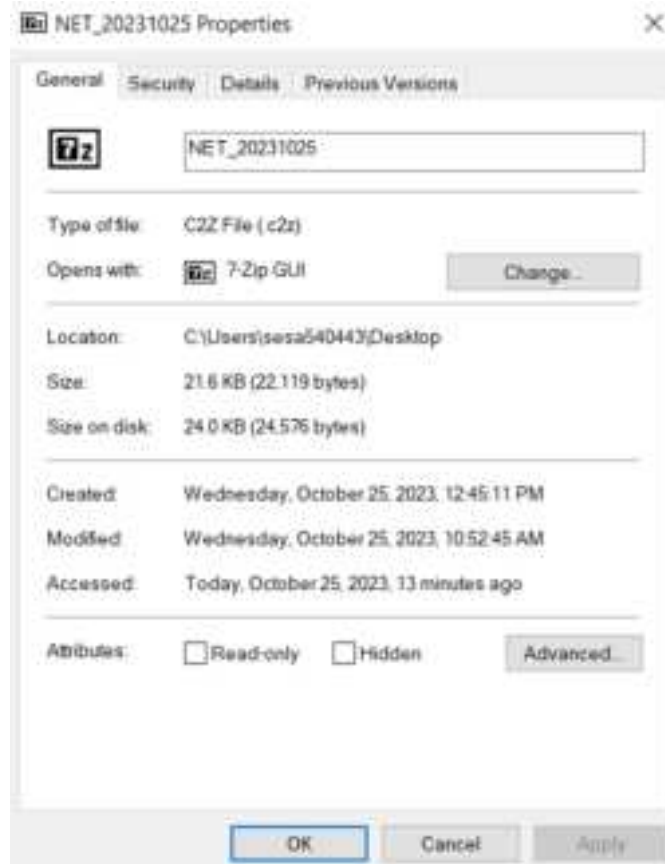
SpaceLogic C-Bus Commission software allows to export project and any associated files from a software as a single file package to save/backup/use elsewhere.

- Any project/all associated project files are considered together as a single file package, including but not limited to:
 - Files contained within its project file folder.



The file package are named/identified as a ".C2Z" file type.

2. The .C2Z file type are registered with Windows (as per Toolkit .CBZ file type).

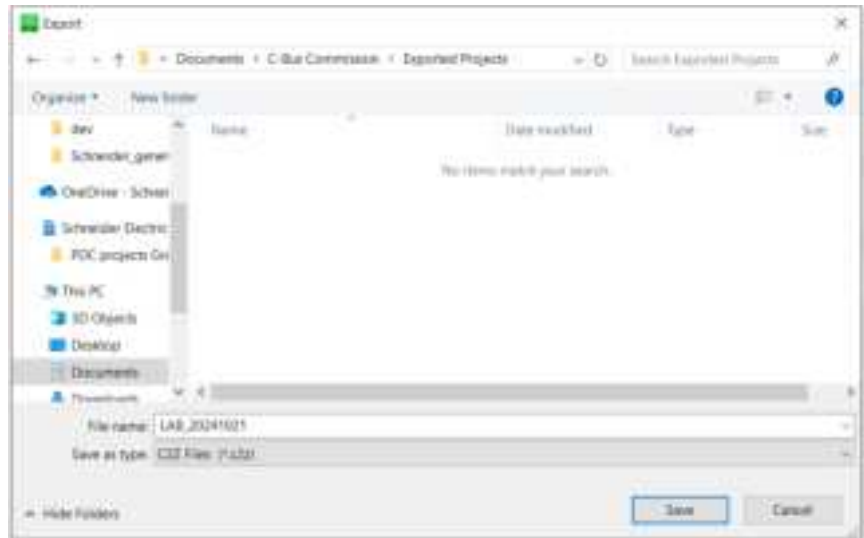


3. The Export function is available and invoked from:
- The  of a project in the project dashboard.

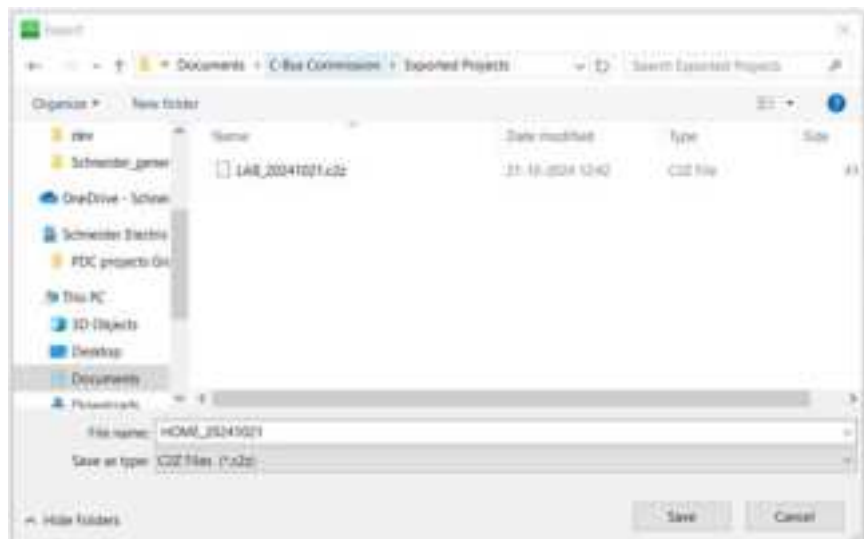


- Right-click on the project in the project dashboard.
4. You can either export the files in C2Z file type or XML file type.

5. When the export function is invoked, the Windows file browser dialog is displayed with a default name and default location proposed.
 - Default name proposed: 'ProjectName'_YYYYMMDD (where YYYYMMDD is the current date). In the **Save as type** drop-down list, by default the C2Z files (*.c2z) is selected.



- Click **Save**. The file is saved in the default location proposed: C:\Users\<Username>\Documents\C-Bus Commission\Exported Projects.



- To export your C-Bus project to the legacy XML format, select the XML Files (*.xml) option from the **Save as type** drop-down list.



NOTE: XML format is compatible with legacy Toolkit and C-Gate2 or other legacy C-Bus tools as well as for use with third party C-Bus Enabled systems.

- Click **Save**. The file is saved in the default location proposed: C:\Users\<Username>\Documents\C-Bus Commission\Exported Projects.

The project and all its associated files are exported successfully from software to the default location.



- If you try to export and save a project of any file type to the C:\Users\<username>\Documents\C-Bus Commission\Projects" location, Error dialog is displayed.



- Click **OK** to close the Error dialog box.

Sort Projects

Prerequisites: More than one project must be created.

SpaceLogic C-Bus Commission software allows you to sort the existing projects using  on project dashboard, either by ascending or descending based on project name.

Overview of Project Space

The **Windows** ▾ displays the different windows in the SpaceLogic C-Bus Commissioning software, which consists of:



- Network Management, page 59
- Library window, page 64
- Workspace window, page 72
- Properties window, page 117
- Deployment queue, page 119

Windows	Description
EXPLORER	This window allows to view and manage all the networks created in the current project.
LIBRARY	This window allows to view the device catalogue details and relevant functions.
WORKSPACE	This window is the main area of display for project information which consists list of devices in the projects database and list of devices in the network.
PROPERTIES	This window allows to view the applicable properties of selected device in a single editor window.
DEPLOYMENT QUEUE	This window displays the process of devices being transferred to Devices in Project and getting deployed to Network devices .

Network Management

The network management is performed in the **Explorer** window which allows to Add networks and displays all the available C-Bus networks in the project.

Each network created consists of 3 nodes:

- C-Bus devices
- Applications
- Application Log

The Network is represented with symbol 

Operation performed on networks:

- Add network, page 59
- Add Bridge network, page 60
- Search network, page 62
- Delete network, page 63

Each network created consists of the following nodes:

1. C-Bus devices, page 65
2. Applications, page 120
3. Application log, page 127

Add a Network

Explorer window allows you to add a C-Bus networks to the project, where each project can have a maximum of 255 networks.

Prerequisites: A Project must already be created and opened.

1. In the **Explorer** window, select the project and click 

Step result: Add Network dialog box is displayed.
2. Fill in the network details in the displayed dialog box and click **create**

The process of creating a network is as demonstrated below:



The Add Network dialog box consists of following fields:

Fields	Description
Network Name	Enter the name of the network maximum of 32 characters

Interface Type	Choose an interface type from the following: • Ethernet This interface type is used to connect a network through a Automation controller or a C-Bus Network Interface (CNI) • Serial This interface type is used to connect a network through a PC Interface (PCI) • C-Bus This interface type is used for interconnection of C-Bus networks using a bridge
Device Type	Enter the type of device: Valid device types for Ethernet Interface are: • Application Controller • Automation Controller • C-Bus Network Interface Valid device types for Serial Interface are: • PC Interface (PCI) • PC Interface (PCI) USB Valid device types for C-Bus Interface is: • C-Bus Network Bridge
COM Port	Communication port which the C-Bus interface device is connected

TIP: Alternate ways to Add a network:

- Click  and select ADD
- Right click on project name in explorer window and select ADD

Add a Bridge Network

The C-Bus bridges provide connectivity between wired C-Bus networks. Each of the bridge units have a near and far side, which relates to whether the side is connected to a local or remote network.

Prerequisites: The project must already be created and at least one network has to be created to use as an transient network.

The Bridge network consists of components and functions as similar to other networks: *C-Bus Devices*, *Applications* (Lighting, Enable, Trigger), and *Application log*.

Bridge network can be created in 2 ways:

Method 1

1. Select the network and click  in the **Explorer** window
2. **ADD NETWORK** dialog box is displayed
3. Select C-Bus as the *Interface type* and fill in the required fields

NOTE: A transit network is a network that is connected to the current network that is being defined.

4. Confirm **Create**

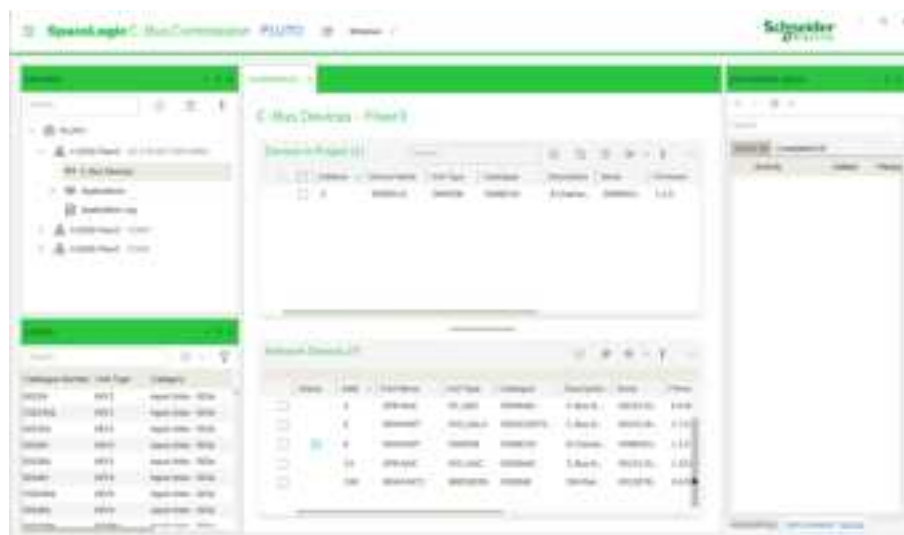
Method 2

Bridge network can also be created from the *Network Devices*. The *Make Network* function creates, configures, and opens a new network corresponding to the other side of the selected bridge or gateway.

1. Open and scan the live *Network Devices*
2. Right-click on the bridge network device

3. Select **Make Network**

The process to create bridge network is as demonstrated below:



CAUTION: When a Bridge network is deleted, all information related to this network will be lost. Far side bridge devices will also be deleted from adjacent networks. Any remote bridge networks connected to this bridge network will not be accessible.

For more details on bridge devices, see Bridges, page 239

C-Bus Network summary

The created C-Bus network (serial, ethernet, transit, bridge) summary can be viewed by selecting the network, the details are displayed in workspace window.

The summary gives the details of the network as shown below:



NOTE: If the network is overpowered (current supply is $\Rightarrow$ 2,001 mA), current supply and its value is highlighted and a warning message is displayed as shown below:



The C-Bus network displays ⚠ or ⚠ attention, if any results and recommendations require action.

The ⚠ is displayed for following C-Bus network states only:

- Underpowered C-Bus network state (where the "Result and Recommendation" field states the message "XXX mA more power required").
- High impedance C-Bus network state (where the "Result and Recommendation" field states the message "1 burden required").

The ⚠ is displayed for following C-Bus network states only:

- Overpowered C-Bus network state (where the "Result and Recommendation" field states the message "Maximum supply current exceeded").

The ⚠ or ⚠ is not displayed for the following C-Bus network states:

- "okay" C-Bus network state (where the "Result and Recommendation" field states the message "OK").
- "empty" C-Bus network state (no C-Bus devices) (where the "Result and Recommendation" field states the message "None").

NOTE: In the scenario where multiple C-Bus network states exist which include the overpowered network state, then ⚠ is displayed.

Search a Network

Prerequisites: The network must already be existing in the project.

Explorer Window allows you to search an existing network in the project

The search bar in the **Explorer** window allows searching for the existing networks in the project.

Enter the name of the network in the search bar.



The network matches the search criteria appears on the screen.

Delete a Network

Prerequisites: The network must already be existing in the project.

Explorer Window allows you to delete an existing networks in the project.

1. Click on the network to be deleted
2. Click  in the Explorer window
3. Confirm with **Yes** in the **Confirmation** dialog box

TIP: Alternate ways to delete a network :

- Click  and select Delete
- Right click on project name in explorer window and select Delete

IMPORTANT: When a Bridge network is deleted, all information related to this network will be lost. Far side bridge devices will also be deleted from adjacent networks. Any remote bridge networks connected to this bridge network will not be accessible.

Library Window

The **Library** window lists the C-Bus Unit and DALI devices available for use in the project. The relevant device types are displayed with respect to whether a C-Bus network or DALI gateway is selected in the **Explorer** window. The operations are performed with regards to a C-Bus device or a DALI device added in the network of the SpaceLogic C-Bus Commission software.

The different operations performed in Library window are:

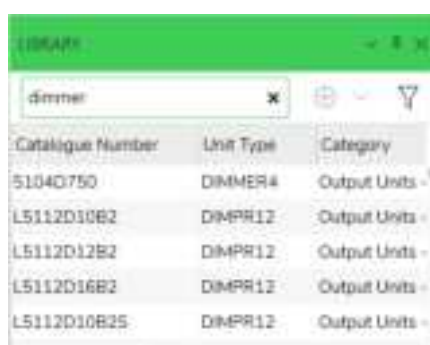
- Search a device, page 64
- Add C-Bus devices, page 65
- Filter, page 64

Search a Device

Prerequisites: A project must already be open in the Explorer window with a network created in the project.

The **Library** window allows searching for a device. The device appears on the list, after the name of the device is entered in the search bar.

1. Select a network in the **Explorer** window
2. In the **Library** window, enter the name of the device in the search bar



Step result: Related devices are displayed in the **Library** window.

TIP: The device can be searched either by giving catalogue number, unit type or category.

Filter

The  displays the devices in the **Library** window based on the categories.



To remove the applied filter, Click  and click **Clear All**

Unit Type Categories

C-Bus units can be divided into categories according to their functional role. The general categories are listed below:

- Output Units, page 199
- Support Units, page 239

C-Bus Devices

The C-Bus Devices in each network allow you to add C-Bus unit devices in the project.

Add C-Bus Device

Prerequisites: Make sure your project is Open, and network has been selected.

1. Select the network of the project you want to add unit devices.



2. On selecting **C-Bus Devices**, **LIBRARY** and **WORKSPACE** window contents are displayed.

NOTE: Make sure you have **LIBRARY** and **WORKSPACE** windows opened.



3. In the **Library** window, select the unit device and click .

This will add device to the project which is displayed in **WORKSPACE** in **Devices in Project** section.

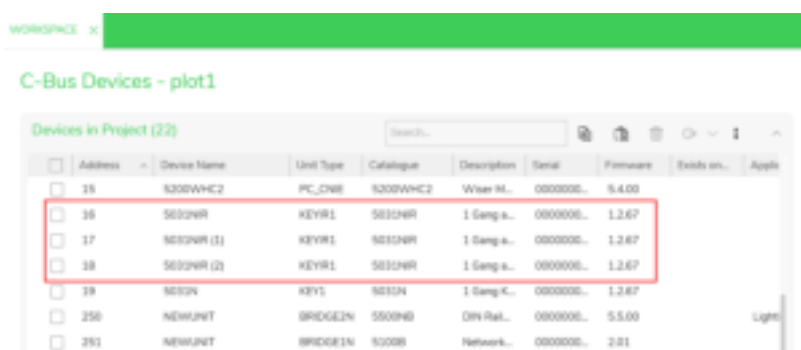


TIP: Alternate ways to add devices:

- Double-click on unit device
- Drag and drop unit device to **Devices in Project**

IMPORTANT:

- When the same unit device is added “N” times, each device postfixes with an incremented number to maintain the uniqueness.



- Each device can be renamed in their respective **Property** window (It is advised to rename the device appropriately).

Each C-Bus device can be configured by making changes in the respective **Property** window, which can be seen based on the Unit Type categories, page 65.

IMPORTANT: In an existing Project, when a **C-Bus Device** node is clicked the existing device name in **Devices in Project** is assigned automatically as per following:

If PART NAME is	"NEW UNIT"	If TAG NAME is	"NEW UNIT"	DEVICE NAME is assigned same as Catalog number	If DEVICE NAME is unique in network node	TAG NAME is same as DEVICE NAME	PART NAME is assigned same as DEVICE NAME (maximum 8 characters)
					If DEVICE NAME is not unique in network node	Numeric 1 is appended to DEVICE NAME	

			not "NEW UNIT"	DEVICE NAME is assigned same as TAG NAME	If DEVICE NAME is unique in network node	PART NAME is assigned same as TAG NAME		
					If DEVICE NAME is not unique in project	PART NAME is assigned same as TAG NAME Numeric 1 is appended to DEVICE NAME and is incriminated for next instance		
	is not "NEW UNIT"	If TAG NAME is	"NEW UNIT"	If PART NAME is	unique in C-Bus network	DEVICE NAME is assigned same as PART NAME	TAG NAME is assigned same as DEVICE NAME	
					not unique in C-Bus network	Numeric 1 is appended to DEVICE NAME and is incriminated for next instance DEVICE NAME is assigned same as PART NAME.		
			not "NEW UNIT"	If TAG NAME is	unique in C-Bus network	DEVICE NAME is assigned same as TAG NAME		
					not unique in C-Bus network	Numeric 1 is appended to DEVICE NAME and is incriminated for next instance DEVICE NAME is assigned same as TAG NAME		

Add multiple C-Bus devices

Prerequisites: The project must already be opened in **EXPLORER** window with a network created in the project.

The **LIBRARY** window allows to add multiple devices at a time.

1. Select the C-Bus Device of a network in the **EXPLORER** window

Step result: The devices that can be added to the network appear in the **LIBRARY** window .

2. Select the device and click  drop-down, choose **Add Multiple**.

TIP: Alternate method to add multiple devices:

- Right click on the device, and select **Add Multiple**.

3. Fill in the device information as demonstrated below:



Add Dali Devices

Prerequisites: A project must already be open in the Explorer window. A network must already be created with a DALI-2 Gateway added to the network, see Add DALI-2 gateway, page 167

1. Select a DALI line in the **Explorer** window



2. Select the Dali device and click  in **Library** window

TIP: Alternate ways to add DALI devices:

- Double-click on unit device
- or
- Drag and drop a unit device to **Devices in Project**

Step result: Selected device is added to the project.

The different DALI ECG devices in each DALI Line are as listed below:

Device Type	Device Name	Meaning
Emergency or Exit Light	DALI ECG DT1 (Generic)	Emergency or Exit Light (Generic)
	DALI ECG DT1 A	Emergency or Exit Light (Switched Maintained Dimmable)

	DALI ECG DT1 B	Emergency or Exit Light (Switched Maintained Non-Dimmable)
	DALI ECG DT1 C	Emergency or Exit Light (Maintained)
	DALI ECG DT1 D	Emergency or Exit Light (Non – Maintained Dimmable)
LED	DALI ECG DT 6	Single Channel LED Device
	DALI 2x ECG DT 6	DALI 2 Channel Device (DT6)
	DALI 3x ECG DT 6	DALI 3 Channel Device (DT6)
	DALI 4x ECG DT 6	DALI 4 Channel Device (DT6)
Channel	DALI ECG	DALI ECG (Generic)
	DALI 2x ECG	DALI 2 Channel Device (Generic)
	DALI 3x ECG	DALI 3 Channel Device (Generic)
	DALI 4x ECG	DALI 4 Channel Device (Generic)
Color Control	DALI ECG DT8	Single Channel Tunable / Color Controllable Device

NOTE: When a DALI channel device is added, based on the number of channels DALI device is added. Each DALI channel device can be collapsed and expanded.

Example, when the DALI 3x ECG DT6 is added the result is as shown below:



To Configure DALI ECG Devices, see DALI ECG devices, page 260

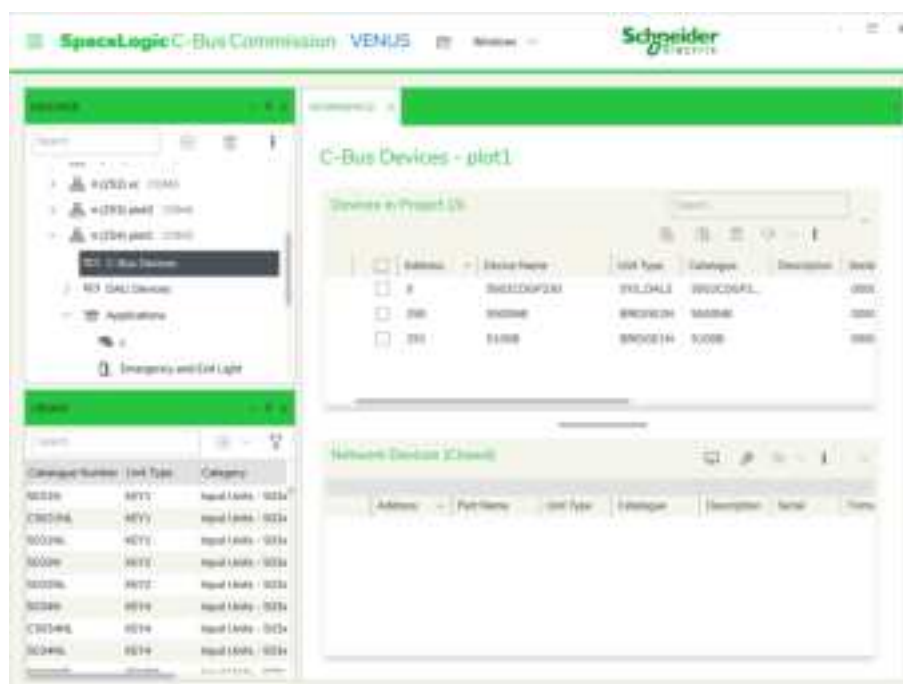
Add multiple Dali devices

Prerequisites: A project must already be open in the Explorer window. A network must already be created with a DALI-2 Gateway added to the network. A DALI Line must already be selected.

1. Select the DALI device and click  drop-down, choose Add Multiple.

Step result: Add Multiple DALI Devices dialog box is displayed.

2. Fill in the device information as demonstrated below:

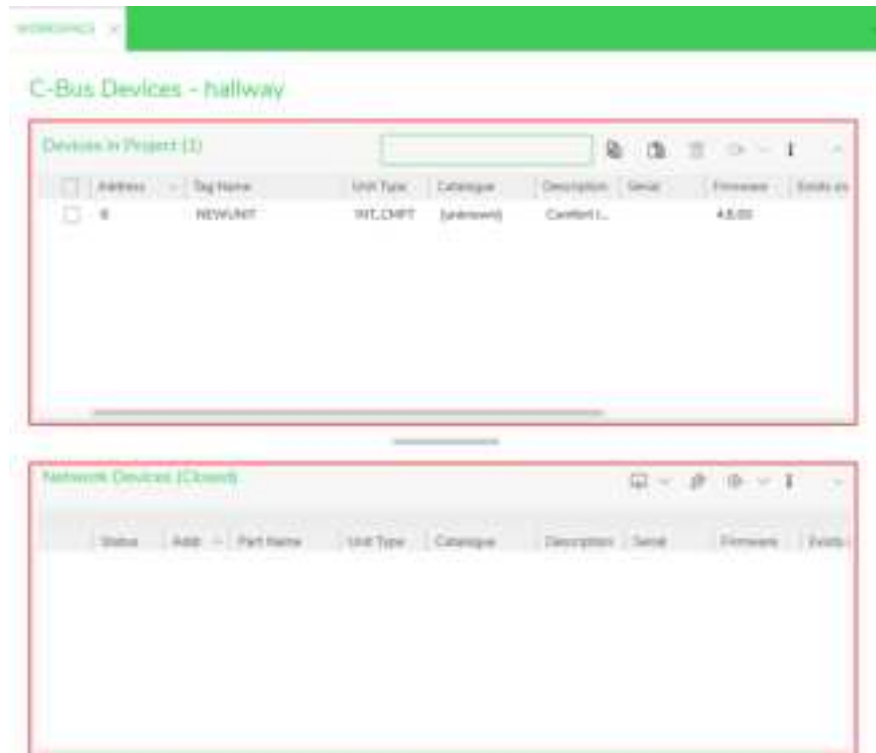


Workspace Window

The **Workspace** window displays the devices in the project and the network. This window allows you to connect your project's devices to the network.

This window consists of two built-in sections for **C-Bus Devices**:

1. Devices in Project, page 73
2. Network Devices, page 76

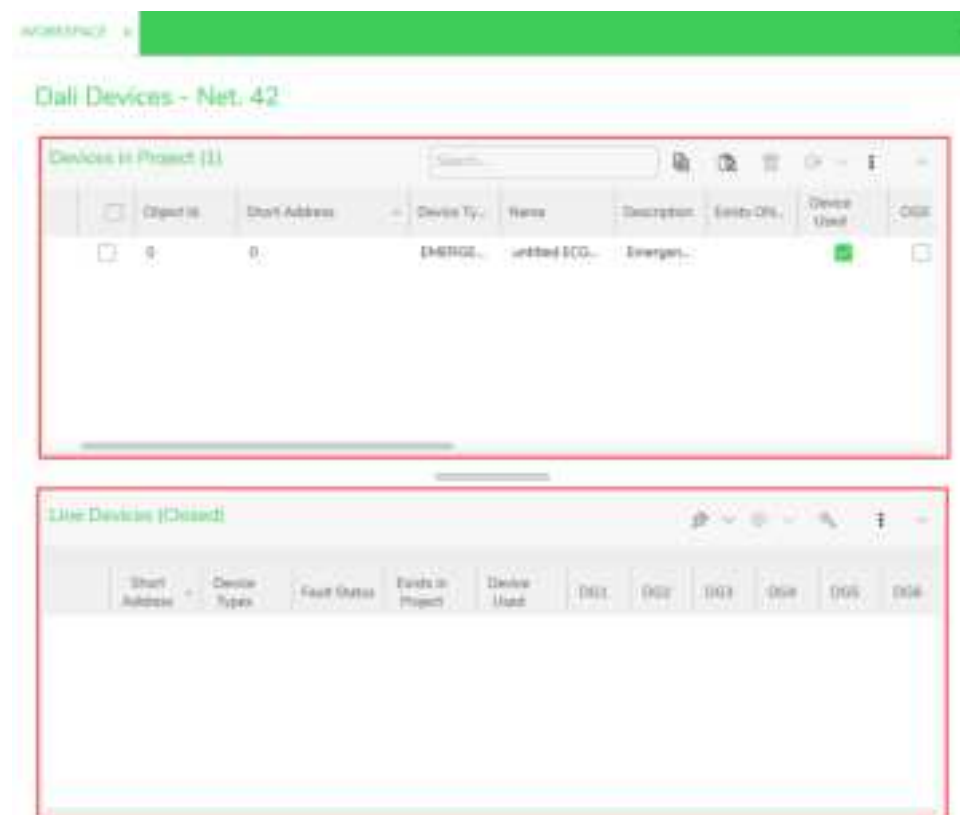


For Dali Devices

Prerequisites: The DALI-2 Gateway must be already added.

This window consists of two built-in sections for Dali Devices:

1. (DALI) Devices in project, page 93
2. Line devices, page 103



Devices in Project

The **Devices in Project** section displays all the devices in the project database.

Fields	Description
Address	This field displays the unit address assigned to the device. NOTE: • For a C-Bus device, the values vary from 0 to 255. • For a DALI device, the values vary from 0 to 63.
Device Name	This field contains the name that user can give to the logical representation of the unit. This name can be up to 32 characters long and is stored in the project database only.
Unit Type	This field displays the unit type of the device on the network.
Catalogue	This field displays the commercial reference for the device.
Description	This field displays the description of the device and cannot be edited.
Serial	This field displays the serial number which exists on the physical network or which has been assigned to the logical representation of the unit.
Firmware	This field displays the version number of the C-Bus interface firmware which exists on the physical network or which has been assigned to a logical representation of the unit in the database.
Exists on Network	Displays whether the device exists on network.
Application	This field displays the name of the application being used for the device.

The operations that can be performed on **Devices in Project** section are:

- Search a device, page 74
- Copy device
- Paste device
- Delete device, page 74
- Deploy device, page 74
- Sort device, page 75

Search a Device

Prerequisites: The devices must already be added in a **Devices in project** section of an network .

The **Devices in project** section allows searching of a device in the existing project database by entering the **Device Name** in the **Search** bar of **WORKSPACE** window.

NOTE: You can also search by entering either **Address**, **Unit Type** , **Catalogue**, **Description** and **Serial** number.

Copy Device

To Be Implemented

Paste Device

To Be Implemented

Delete Device

Prerequisites: The devices must already be added in a **Devices in project** of network and must be fully matched with **Network devices**.

1. Select the device check box.
2. Click .

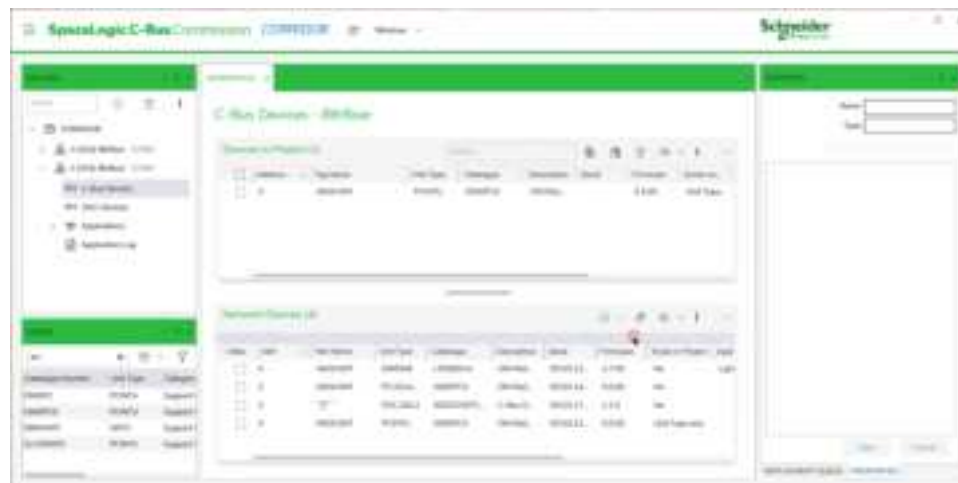
TIP: Alternate method to delete device:

Select the device check box, right-click on **Devices in project > Delete**

Deploy Devices from Project to Network

Prerequisites: The network must be already created. The C-Bus network should be opened and scanned C-Bus devices. The devices must be fully matched, click **How to do fully matched devices**.

The process to deploy devices is as demonstrated below:



Sort Device

Prerequisites: The devices must already be added in a **Devices in project** of network.

The devices in the device list can be sorted using  and selecting an appropriate sort method.

Readdress

Prerequisites: The C-Bus devices must be already added to the project database.

The Readdress function allows the readdressing of the C-Bus devices within a C-Bus network or project database.

To readdress a network:

1. Select a device and right-click on section **Devices in Project > Readdress Project Device**.

Readdress Project Device dialog box is displayed.

2. Choose the address and confirm **OK**.

NOTE: Readdressing cannot be performed on Bridge devices.

IMPORTANT:

- Readdress Project Device is used when an existing device address needs to be utilized for another device.
- **Readdress to Match Network** is used to perform fully match, see [How to do fully matched devices](#).

If there are a lot of logical units and want to synchronize a physical unit with one, the Readdress to Match Network function is useful for finding logical units with the same unit type.

The Readdress to Match Network operation searches for a unit/device within the logical list(scanned devices) for any compatible unit types. If none are found, a message box confirms that there is “no match”. If more than one compatible unit types are found, the Readdress Project Device dialog box appears displaying the choice.



Choose the device and confirm **OK**.

Network Devices

The **Network Devices** section displays the devices physically connected to the C-Bus Network, provided a C-Bus Interface is connected to the C-Bus Network and the software is able to communicate to this interface.

The DALI devices will be displayed when a DALI line is selected, provided the C-Bus DALI- 2 Gateway is part of the C-Bus Network.

NOTE:

- The C-Bus Network must be opened and scanned to display the C-Bus Devices on the Network.
- The DALI line must be scanned to display the DALI devices on the selected DALI line (DALI-2 Gateway must be reconciled before scanning the DALI line).

Fields	Description
Status	This field displays firmware update icon for the C-Bus Devices indicating a new firmware is available for a respective C-Bus Device and an upgrade is advised.
Address (Addr)	This field displays the unit address assigned to the device. NOTE: • For a C-Bus Device, the values vary from 0 to 255. • For a DALI device, the values vary from 0 to 63.
Part Name	This field displays a 8 characters long name that is stored in the device given by the user.
Unit Type	This field displays the unit type of the device on the network.

Catalogue	This field displays the commercial reference for the device.
Description	This field displays the description of the device and cannot be edited.
Serial	This field displays the serial number that is on the physical device which is unique to all the devices.
Firmware	This field displays the version number of the of the physical device. Some devices have multiple firmware's: interface board, main board. By default, here the software will display the Main board firmware.
Exists in Project	This field displays whether there is a matching device that exist on the network. Matching rules: 1. Yes: Fully matched, where the unit address, serial number, unit type and firmware version are the same in project and on the network. 2. Unit Type Only: Partial matched, where the unity type, firmware and unit address are the same in project and on the network.
Application	This field displays the selected device's application address that the device has been assigned.
Voltage	This field displays the voltage of the device.

The operations that can be performed in this section are:

- Open C-Bus network, page 77
- Open C-Bus Network Using Open Using Feature, page 77
- Scan C-Bus devices, page 82
- Transfer device from network to project, page 82
- Sort line/network devices, page 87

Open C-Bus Network

Prerequisites: The C-Bus Interface must be connected to the C-Bus Network and the software must be able to communicate to this interface.

The Open Network option opens a network connection to the C-Bus Commission. To open the C-Bus Network:

1. Select the network from the project.

NOTE: When the network is closed, the network appears as shown below:



2. Click **C-Bus Devices**.

In the **Workspace** window, the **Network Devices** section appears as shown below before opening the network.



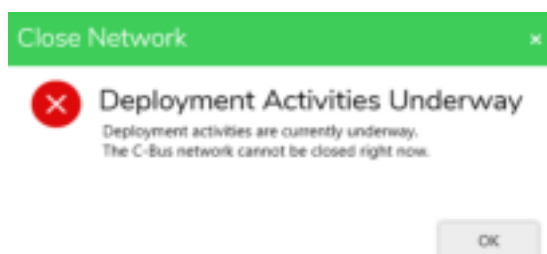
3. Click  in **Network Devices** section.



The network opens.



IMPORTANT: Do not close the network while deployment activities are in progress.



Open C-Bus Network Using Open Using Feature

Open Using can be used on both standalone networks and bridge networks. It serves as a temporary interface that allows for the commissioning of the network without altering the existing network structure/topology. This method does not modify the network's interface within the project. Instead, it provides a temporary connection for commissioning purposes during a specific instance or session.

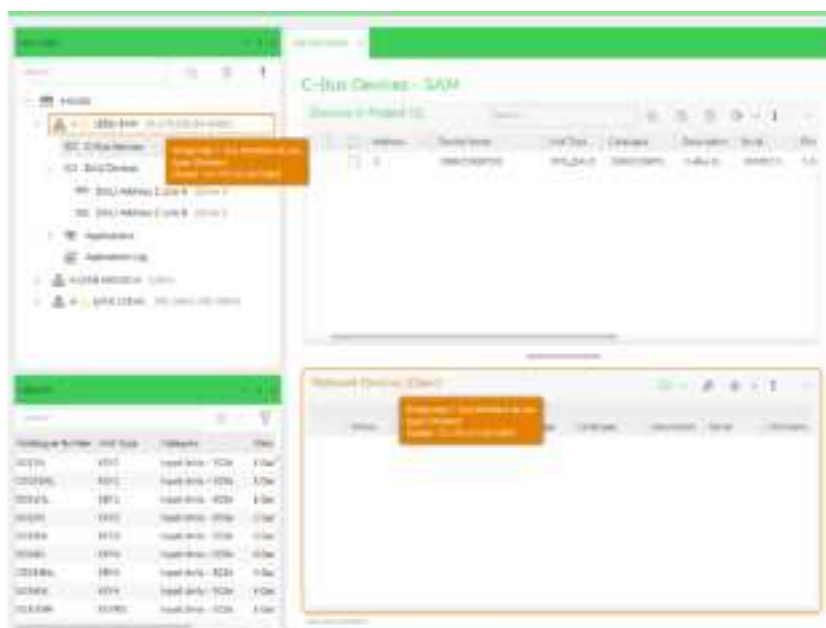
1. Select the network from the project.
2. Click **C-Bus Devices**.

3. In **Network Devices**, click  drop-down and select **Open Using**.

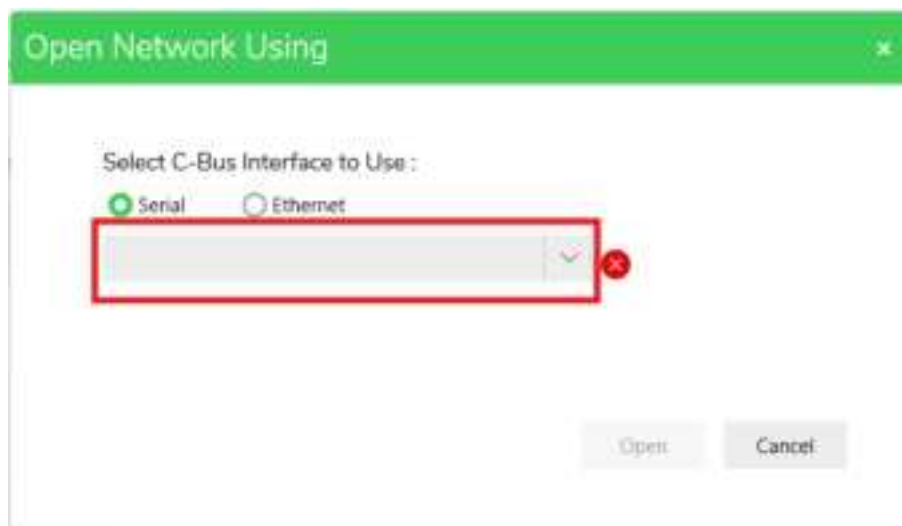


Once the C-Bus Network is opened using the **Open Using** feature:

- The **Network Devices** section border is highlighted in orange color.
- The **Network Devices** title changes to orange color.
- Network node border is highlighted in orange color.
- Tooltip messages of **Network Devices** and Network node are highlighted in orange color.



An **Open Network Using** pop-up appears.



NOTE: By default, **Serial** option is selected.

4. Select the COM port number and device's name from the drop-down.



Once you select the port number/device name, the **Open** button is enabled.

NOTE: You can easily view the serial port associated with the PCI name, eliminating the need to search for it in the Device Manager.

5. Select **Ethernet** to open network devices using an IP address.



By default, the **Port** is displayed as 10001.

6. You can either:

- Select the **IP Address/Host** from the drop-down.
- or,
- Enter the new **IP Address/Host**.

IMPORTANT: When you enter the IP Address:

- Ensure to have four numbers (0-255) separated by periods.
- Do not start with zero unless the address is zero itself.

When you enter the Host Name:

- The host name can contain up to 63 characters, including letters (a-z), digits (0-9), and hyphens (-).
- It must not start or end with a hyphen.
- The total length of the host name must not exceed 255 characters.
- Each label within a host name (separated by periods) can be up to 63 characters long.



Once you select or enter the **IP Address/Host**, the **Open** button is enabled.

NOTE: The IP address/host drop-down menu keeps a record of the last 20 recently used entries. When a new IP Address or Host is used, it is added to the top of the list, and the oldest entry is removed to maintain the list size.

If you fail to follow the criteria when entering **IP Address/Host**, the following error message appears.



7. Click **Open**. The network opens.

Once the network is opened, the below functions are disabled:

- Delete Network
- Add Bridge Network
- Open Bridge Network
- Open and Scan Bridge Network
- Make Network

Scan C-Bus Network

Prerequisites: The network must be opened before scanning.

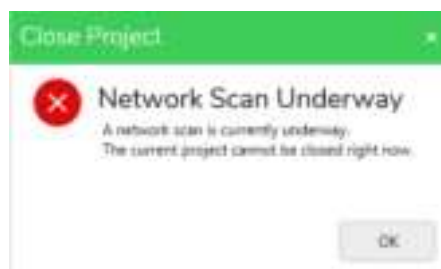
The C-Bus Devices present in the network appears in the **Devices on Network** section, after the network is opened and scanned. The DALI devices present on the line appears in the **Line Devices** section, after the DALI line is scanned.

1. Click  to search for the devices in the network.

NOTE: If network scanning is done without opening the network, internally the network is opened first and then scanning is performed.

IMPORTANT:

- If you remove a device from the project that has applications or groups configured, scanning the network will automatically recreate those applications or groups with default names.
- Do not close the network or project while scanning is in progress.



- If you try to scan the network device in C-Bus Commission while a network scan is already in progress in the Toolkit, an **Error** pop-up will be displayed.



2. Once the scanning is completed,  firmware update icon is displayed for the C-Bus Devices, indicating a new firmware is available for the C-Bus Device.

Status	Add	Port Name	Unit Type	Catalogue	Description	Serial	Firmware	Exists in Project	Application
	1	NEWLART	PCNTU	500PDU	SH Rel...	8001122	5.5.00	No	
	8	SPR/NAC	PC/NAC	500NAC	C-Bus N...	8001115	5.5.00	No	
	3	NEWLART	SYG.DALI	500DGP...	C-Bus D...	8001118	1.8.0	No	Lighting
	8	NEWLART	DINCODE	500D111	8 Channe...	8006004	1.1.0	No	Lighting
	24	SPR/NAC	SYG/NAC	500NAC	C-Bus N...	8001115	1.11.0	No	
	248	NEWLARTS	BRIDGE24	500B48	DH Rel...	8003078	5.4.00	No	

3. Click  to perform firmware upgrade for a respective C-Bus Device.

Once the firmware is successfully upgraded, re-scanning the Network Devices will display the new firmware version.

NOTE: After you update the firmware for a selected device and re-scan the Network Device, the firmware icon will no longer be displayed.

Extract All and Deploy All C- Bus Devices

With C-Bus Commission, you can extract and deploy all C-Bus devices between your project and the live network without switching to Toolkit. So, the need to

toggle between client applications is minimized, software inefficiencies are reduced and the user experience is enhanced.

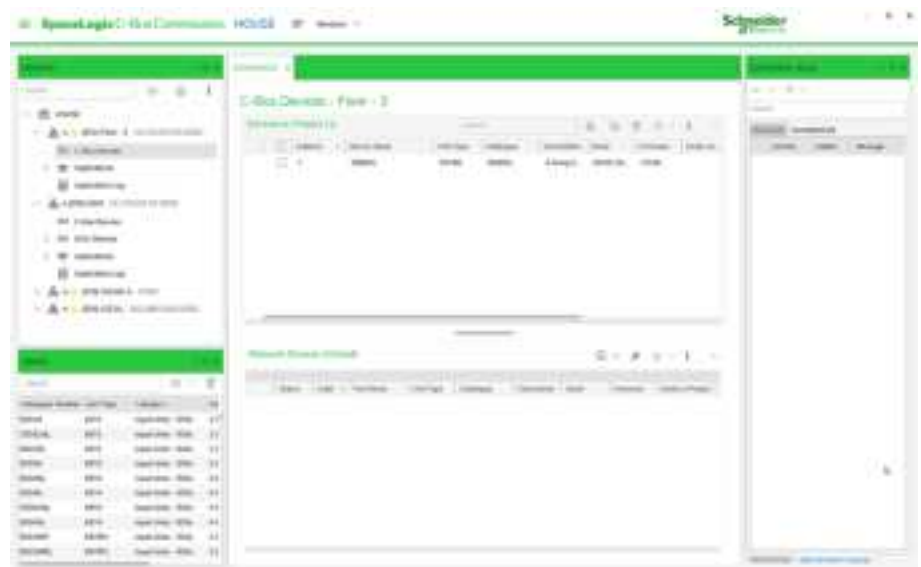
When you perform the **Extract All/Deploy All** function, it extracts/deploys both supported and unsupported devices (in the **PROPERTIES** window). This includes most of the wired C-Bus device family and also includes the standard Deploy and Extract buttons when selecting a single device or multiple devices.

Prerequisites:

- The network must be already created.
- The C-Bus network must be opened, and C-Bus devices must be scanned.
- Devices for deployment/extraction must be either partially matched or fully matched.

A device is said to be partially matched if the field information of address, unit type and firmware in **Devices in Project** are same as in **Network Devices**.

- If a device is fully matched, then the device can be extracted to the project or deployed to network directly.
- The below video demonstrates how to extract single device from **Network** to **Project**.



To Extract All Devices

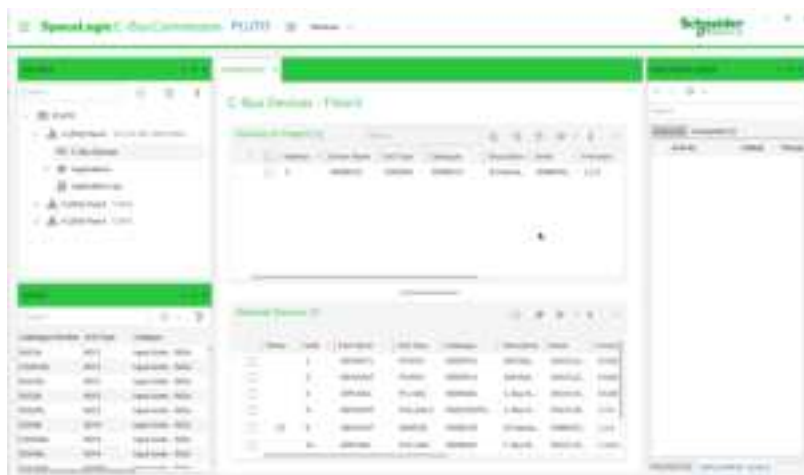
1. In the **Network** section, click  drop-down and choose **Extract — Extract All to Project**.



NOTE: Multiple devices can be extracted only if all of them are fully matched.

TIP:

- If a device does not exist in the project, you can add the device in the **Project** from the library and extract all the live data into the project device.
- The firmware version of the device added to the project must match the firmware version of the live network device.
- If a device is partially matched then, the device must be matched fully with the project device in **Project**. The video of fully matching the devices is demonstrated below:

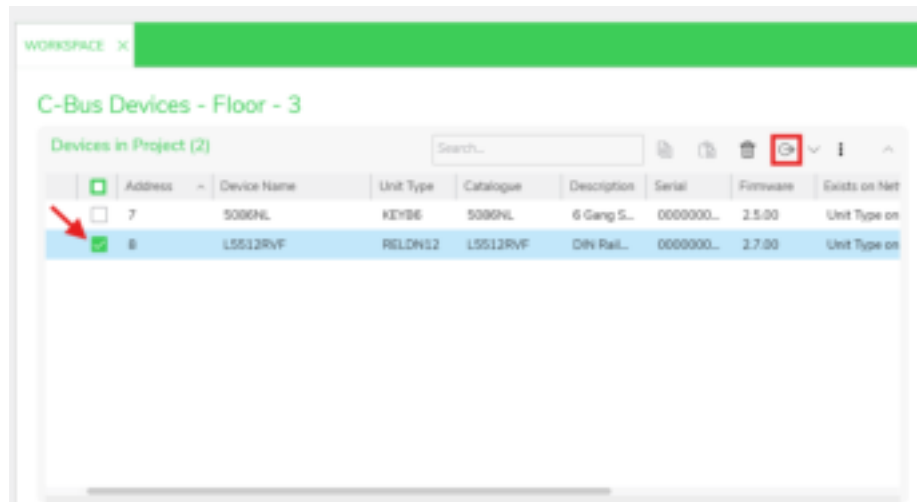


Once extract all function is completed, all newly extracted devices are placed with their live network configurations into the project.

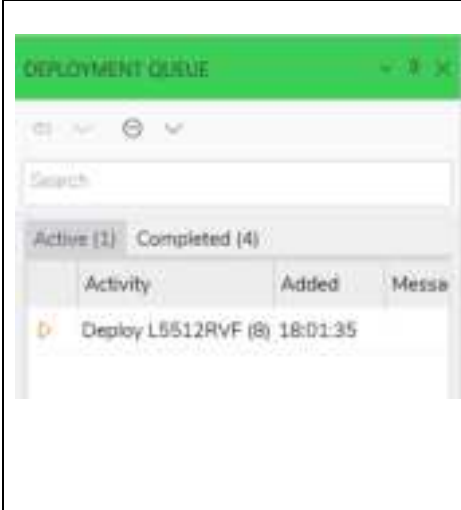
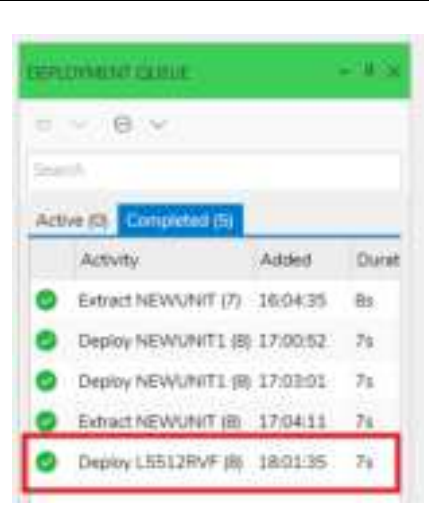
To Deploy Single Device/All Devices

1. Select the device in **Devices in Project** section and click  to deploy selected device to C-Bus Network.

NOTE: You can select one or more devices.



The project device information is transferred to the network devices. You can view the **Active** and **Completed** status in **DEPLOYMENT QUEUE** window.

Active	Completed
 The screenshot shows the 'DEPLOYMENT QUEUE' window with the 'Active' tab selected. It displays one active task: 'Deploy L5512RVF (8)' at 18:01:35.	 The screenshot shows the 'DEPLOYMENT QUEUE' window with the 'Completed' tab selected. It displays five completed tasks. The last task, 'Deploy L5512RVF (8)' at 18:01:35, is highlighted with a red box.

2. To deploy all devices to C-Bus Network, click  drop-down and choose **Deploy – Deploy All to Network**.



You can view the **Active** and **Completed** status in **DEPLOYMENT QUEUE** window.

Active	Completed

NOTE: The **Deploy - Deploy All To Network** will be enabled only when at least one device is in a matched or partially matched state.

Once deploy all function is completed, all newly deployed devices are placed with their project configurations into the live network.

The deploy all function will deploy the project device information to the device (s) on the network, regardless of whether the device can be edited in the Property Editor of C-Bus Commission or was previously edited in Toolkit.

The below table lists the legacy devices supported in C-Bus Commission.

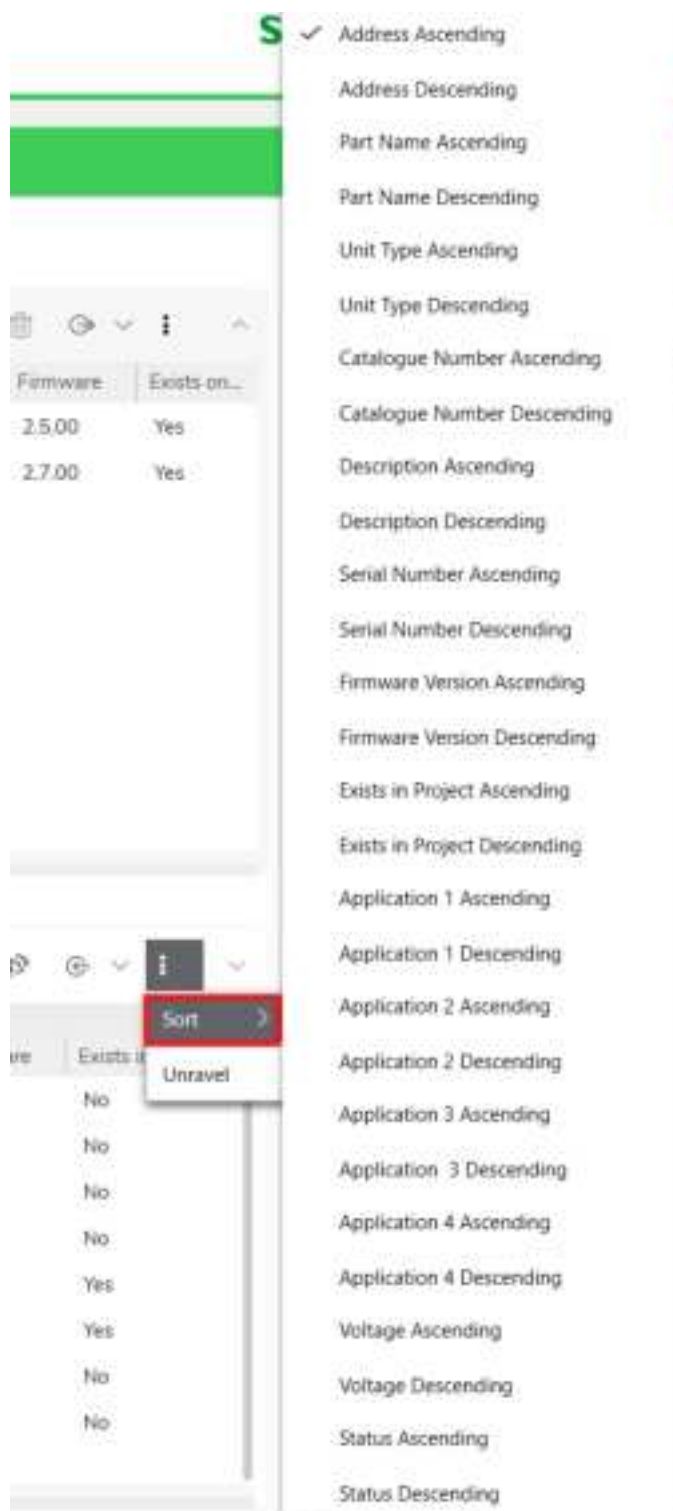
KEY1	KEYAUX4	KEYAV4	KEYP2	KEYDV2	RELDN8SP	DIMDN4	PC_INT_1	PC_PGA	PC_CTD
KEY2	DINAUX4	KEYA6	KEYP4	KEYDV3	RELDN8B	DIMDN4F	PCINT4	PC_PACA	PC_CTDL
KEY4	KEYBC2	KEYA8	KEYP6	KEYDV4	RELDC4	DIMDN8F	PC_CNIEI	PCINTU	PC_WHAM
KEYIR1	KEYBC4	KEYB2	KEY-BIR2	CLK2	RELD8B1	DMXDO12	PC_CNIED	PCLOCA-LU	INT_CIS
KEYIR4	KEYM2	KEYB4	KEY-BIR4	RELAY1	RELMB8	DIMDN8	PC_CNICI	EN_UNIV	INT_AXEZ
KEYC1	KEYM4	KEYB6	KEY-BIR6	RELAY2	DSIMB8	DIMDS8	PC_CNICD	PC_MIND2	EN_AXEZ
KEYC2	KEYM8	KEYH1	KEYV1	RELAY4	ANOMB8	ANODN4	PCLOCAL4	PC_CTB	INT_CMFT
KEYC4	KEYA1	KEYH2	KEYV2	DIMMER4	DIMPR1	PC_LOCAL	PC_CBTI	PC_CTBL	EN_CMFT
KEYCIR1	KEYAV2	KEYH3	KEYV3	AN_OUT4	DIMPR2	PC_INT	PC_CTA	PC_CTC	INT_MIND
KEYCIR4	KEYA3	KEYH4	KEYD-V1	RELDN8	DIMPR4	PC_INT1	PC_IRT2	PC_CTC3	INT_HS

INT_D16	INT_ELK	INT_VIEO	INT_HUIO	INT_AQUA	BRIDGE1N	BRIDGE1F	BRIDGE2N	BRIDGE2-F	GATEWLSN
GATEWLS-F	RELSM8	PC_CNICW	PC_CNIC	PC_CNIE	PC_CNIEW	SYSWSR2			

Sort Device

Prerequisites: The devices must already be opened and scanned in a **Network**.

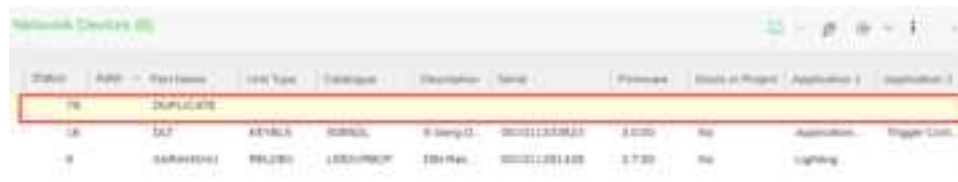
1. Click  to sort the devices in the live network.
2. Select **Sort** from the available options and then select an appropriate sort method.



Unravel

Unravelling unit address is the process of giving unique unit address to all units within a C-Bus Network.

Unravelling unit address is important when you are adding C-Bus units to the physical address. When new C-Bus units are added to the network which have been previously used on another network, they may be configured with unit addresses that are already taken on the C-Bus Network.



Status	Addr	Part Name	Unit Type	Manufacturer	Description	Serial	Firmware	Ready to Program	Application 1	Application 2
76	DUPLICATE									
16	167	KEYPAD	KEYPAD	9 Gang 12	000011001000	0.000	No	Application	Single Conf.	
18	180	Lighting	RELAY	1000000000	000011001000	0.700	No	Lighting		

C-Bus network scanning process identifies the C-Bus units with duplicate addresses, which is highlighted as duplicate.

On identifying duplicate the confirmation box is displayed to resolve the conflict.



1. Select **No**, to retain the duplicate address.

2. Select **Yes**, **Confirmation** dialog box is displayed to unravel duplicate network devices.



- a. If you select **No**, the duplicate address is retained.

This can be resolved manually :

To unravel duplicate unit addresses, select the device and click  select **Unravel**.

TIP: Unravel can also be done by right-click **Network Devices > Unravel**.

- b. If you select **Yes**, unravelling process is initiated.

Name	Unit ID	Unit Type	Serial Number	Location	Device	Address	Status	Remarks
Duplicate								
10	100	PC_MCD	001001	10000000	10000000	10000000	10000000	10000000
10	100	PC_MCD	001001	10000000	10000000	10000000	10000000	10000000
10	100	PC_MCD	001001	10000000	10000000	10000000	10000000	10000000
10	100	PC_MCD	001001	10000000	10000000	10000000	10000000	10000000
10	100	PC_MCD	001001	10000000	10000000	10000000	10000000	10000000

- c. Once unravel is completed, the details of unravelled devices and their new addresses are displayed.

Unit Type	Serial Number	Old Address	New Address
PC_MCD	001001	10000000	10000000
PC_MCD	001001	10000000	10000000

The details can be copied to the notepad for future use or/and close the window.

All the addresses in the network are unique.

Readdressing

The Readdress function allows the readdressing of units within a C-Bus Network or database. When you readdress a matched device, the **Readdress matching device in Project** check box is enabled to ensure the matched device is also updated in the database.

To readdress a network:

1. Right-click on **Network Device** > **Readdress Network Device**.
Readdress Network Device pop-up is displayed.



Readdress Network Device

Current Address : 7

New Address : 2

☒ Readdress matching device in Project

OK Cancel

2. Select the **New Address** and click **OK**.

NOTE: Readdressing cannot be performed on Bridge devices.

If the C-Bus project has only serial or C-Bus Network Interface (CNI) connections, the re-addressing of a single network is straightforward.

TIP: The addressing structure must be maintained when readdressing networks.

The network device is readdressed.

To view the property editor:

1. You can either:

- Right-click on **Network Device** > **Load Properties**.



or

- Double-click on the **Network Device**.

NOTE: When you try to load a live C-Bus network device with unit address 255 into the **PROPERTIES** window, an **Error** pop-up is displayed.

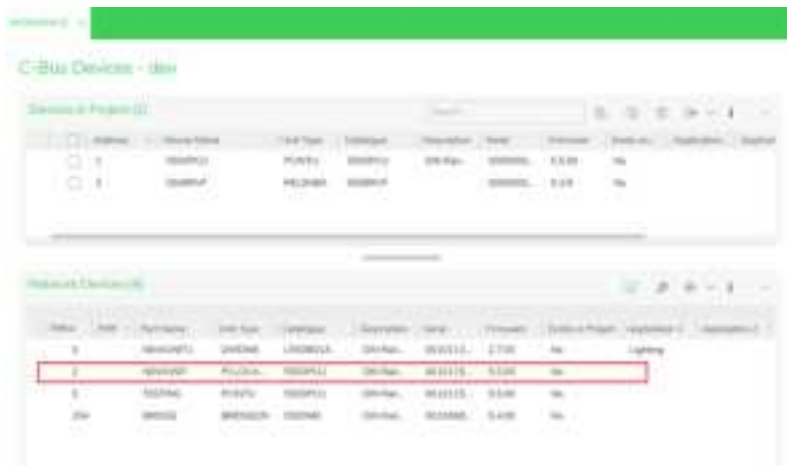


Dynamic Mode devices

When PCI or CNI devices are connected, they are identified as different unit types. The software will not allow these dynamic types to reconcile, deploy or extract with the dynamic device modes.

To handle the dynamic device modes (unit types) when network is open:

1. After scanning a network and discovering a network device with a unit type variant of LOCAL, it is possible to match the network device to a project device using the existing matching rules.

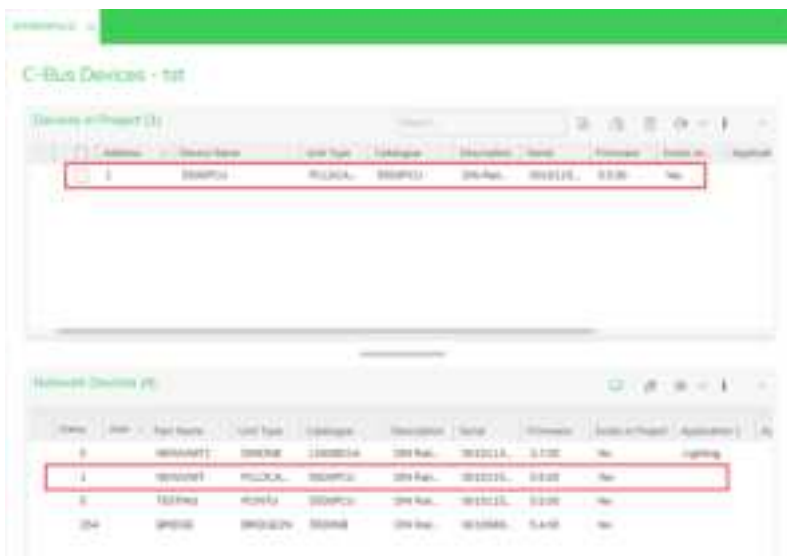


2. The match status will reflect **Yes** or **Unit Type Only** if the alternative LOCAL unit type is discovered on a network scan and existing matching rules are met.



NOTE: The Unit Type of the project device will not change after the matching status is updated (it will never reflect the LOCAL Unit Type, and cannot be set to the LOCAL Unit Type variant).

3. All existing operations and functions will be allowed once the match status is set.



Devices in Project (DALI)

Prerequisites: Make sure the DALI Gateway is already added to project database.

The **Devices in Project** section displays all the DALI devices in the project database.

Field	Description
Object Id	Displays the object Id of the device (the DALI line address which ranges between 0-63).
Short Address	Displays the short address of the device (the physical device address).
Device Type	Displays the type of the device.
Name	Displays the name of the device.
Description	Displays the description of the device.
Exists on DALI Line	Displays whether the device is existing on DALI line or not.
Device used	Displays the devices is used or not (default it will be selected).
DG (DALI Groups 1–16)	Displays the selected DALI groups for each DALI device.
Application	Displays the selected device's application number (default lighting application).
C-Bus Group	Displays the selected C-Bus group address.

The operations that can be performed on **Devices in Project** section are:

- [Search a device, page 93](#)
- [Copy device](#)
- [Paste device](#)
- [Delete device, page 94](#)
- [Deploy devices, see Deploy device](#)
- [Sort devices, page 94](#)

Search a Device

Prerequisites: The DALI gateway and DALI devices must already be added in a **Devices in Project** section of an network .

The **Devices in Project** section allows searching of a DALI device in the existing project database by entering the device name in the **Search** bar.

NOTE: You can also search by entering either *Unit Type* , *Catalogue* or *Description*.

Copy Device

To Be Implemented

Paste Device

To Be Implemented

Delete Device

Prerequisites: The DALI devices must already be added in a DALI line of network and must be reconciled.

1. Select the DALI device check box.
2. Click .

TIP: Alternate method to delete device:

Select the device check box, right-click on **Devices in project > Delete**.

Deploy DALI Devices from Project to Network

Prerequisites: The DALI device must be reconciled before deploying to network.

Once the DALI device are configured, they can be deployed in two ways:

Method 1:

1. Select the DALI device in **Devices in Project** section.
2. **Save** the settings and check the **Deploy to Network**.

Method 2:

1. Select the DALI device in **Devices in Project** section.
2. **Save** the settings.
3. Click  on **Devices in Project** section.

Sort Device

Prerequisites: The devices must already be added in a **Devices in Project** of network.

The DALI devices in the device list can be sorted using  and selecting an appropriate sort method.

50/50 Reconcile

Prerequisites: The DALI devices must be added to project and **Line Devices** must be scanned.

The 50/50 function allows a user to quickly find the desired device on the DALI line by turning half on and half off at the same time and assist in finding the specific device and reconcile it.

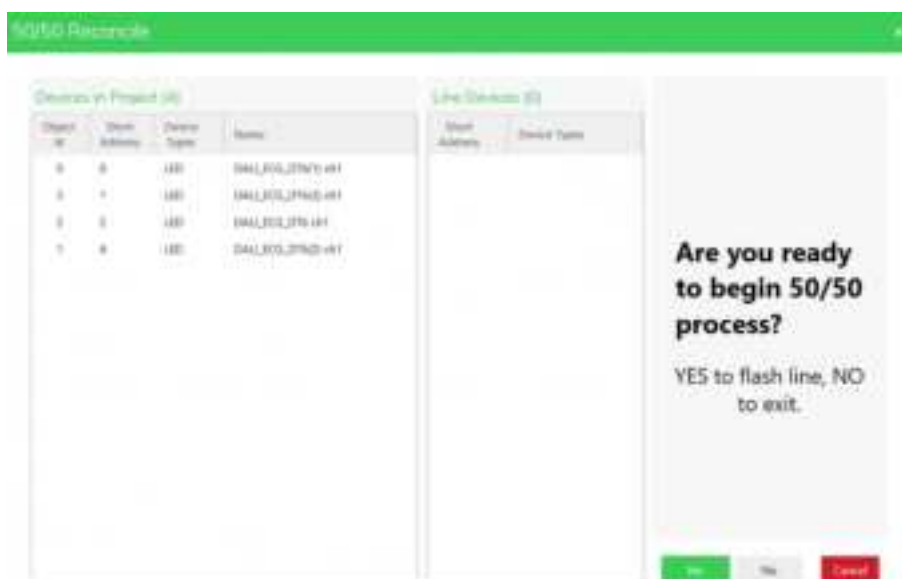
NOTE: A 50/50 function is performed depending on the type of device selected.

- Devices which cannot perform 50/50 are filtered out.
- Example, If the user is using a generic device type in their project to perform 50/50, it will filter for all other device types except for Emergency Device type C & D as they are not compatible.
- If there is only one compatible device type on the network, 50/50 will be aborted as it cannot be performed on a single device (Instead use identify function).

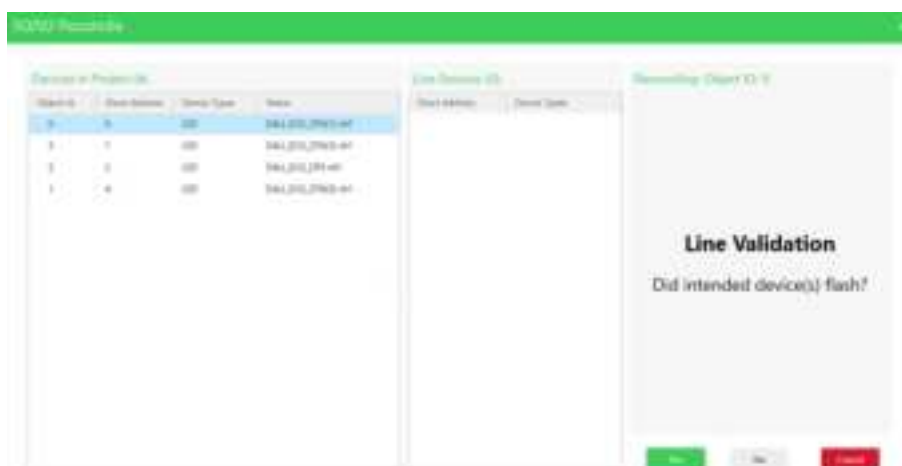
To perform 50/50:

1. Select the device and right-click on the section, **Devices in project > 50/50**.

A 50/50 dialog box is displayed



2. If you choose **Yes**, it will display Line Validation “Did the intended device(s) flash”.



Confirm **Yes**, if flash is seen on physical device else confirm **NO**.

3. On confirming **Yes**, 50/50 is performed on all light devices of selected line.



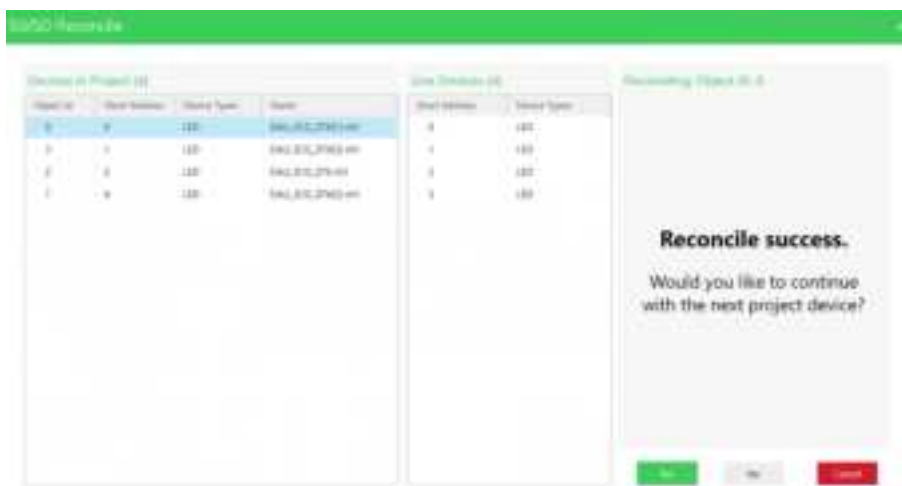
4. If there is no light On confirm **No** , the 50/50 process will be performed on other half of the line devices.



5. The process continues until the device has been selected in the DALI line.



6. On confirming **Yes**, it will confirm successful reconciliation.



After Reconciliation, the reconciled devices are removed from the **Devices in project** and **Line Devices** of 50/50 window.

7. The Reconciled status of a device is visible in **Devices in Project** as well as in **Line Devices** section.

Object ID	Short Address	Device ID	Name	Description	Status OK	Device Used			
1	1	LED	DALI_LED_01	LED Type					
2	2	LED	DALI_LED_02	LED Type					
3	3	LED	DALI_LED_03	LED Type					
4	4	LED	DALI_LED_04	LED Type					
5	5	LED	DALI_LED_05	LED Type	Reconciled				
6	6	LED	DALI_LED_06	LED Type					

IMPORTANT: After reconciling, the 50/50 is automatically displayed for the next object Id unless confirmed **Cancel**.

NOTE: During any stage of reconciling, 50/50 process can be aborted by clicking **Cancel**.

Readdress

Prerequisites: The DALI devices must be already added to the project database and Line devices must be scanned.

The Readdress function allows the readdressing of the DALI devices within a C-Bus network or project database.

NOTE: DALI device can be readdressed in either **Devices in Project** or **Line Devices**

To Readdress, select a DALI device and right-click on section **Devices in Project / Line Devices > Readdress**.

Readdress Project / Network Device dialog box is displayed (depending from which section readdress is being performed), choose the address and confirm **OK**.

IMPORTANT: Readdress is performed only on Short address.

NOTE: Readdress is used when an existing device address needs to be utilized for another device.

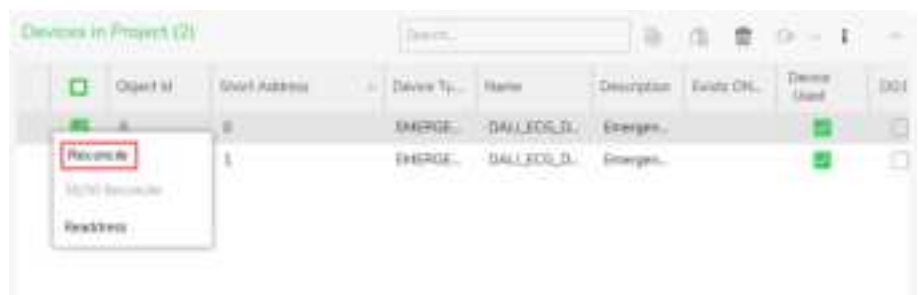
Reconcile

Reconciling is the process of matching the device available in both **Devices in project** and **Line Devices**.

Reconcile can be achieved either via 50/50 process or by manually.

To perform Reconcile manually:

1. Select the DALI device in both the **Line Devices** and **Devices in project** section.
2. Right click on either of section and select **Reconcile**.

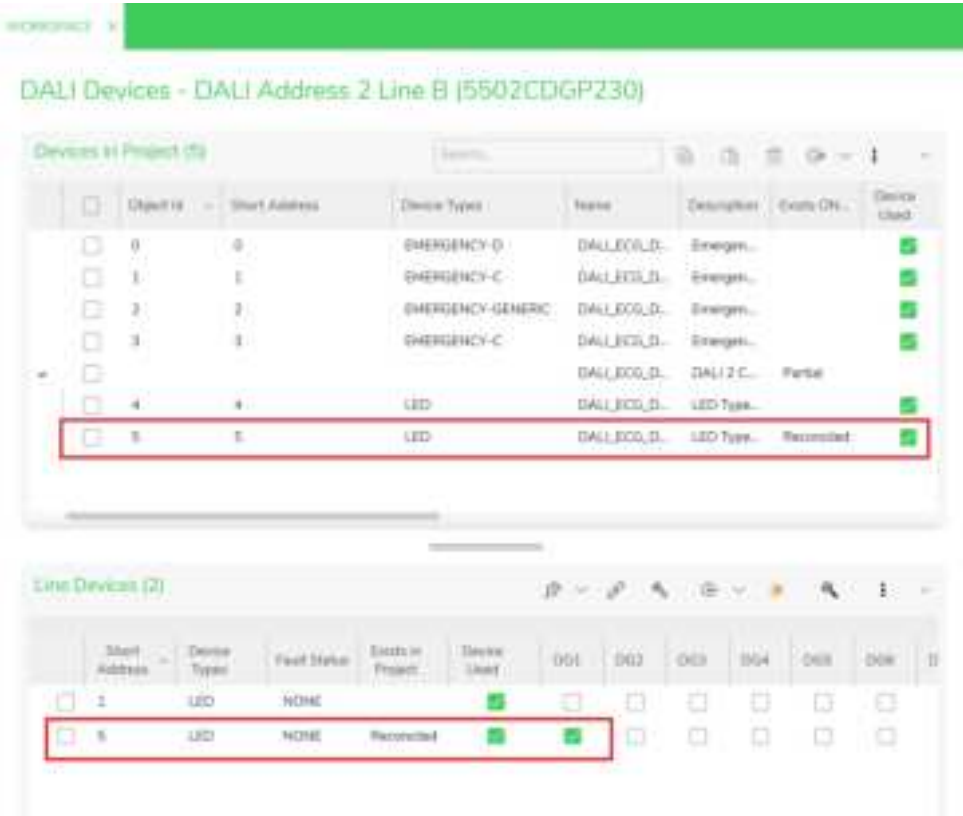


Un-Reconcile

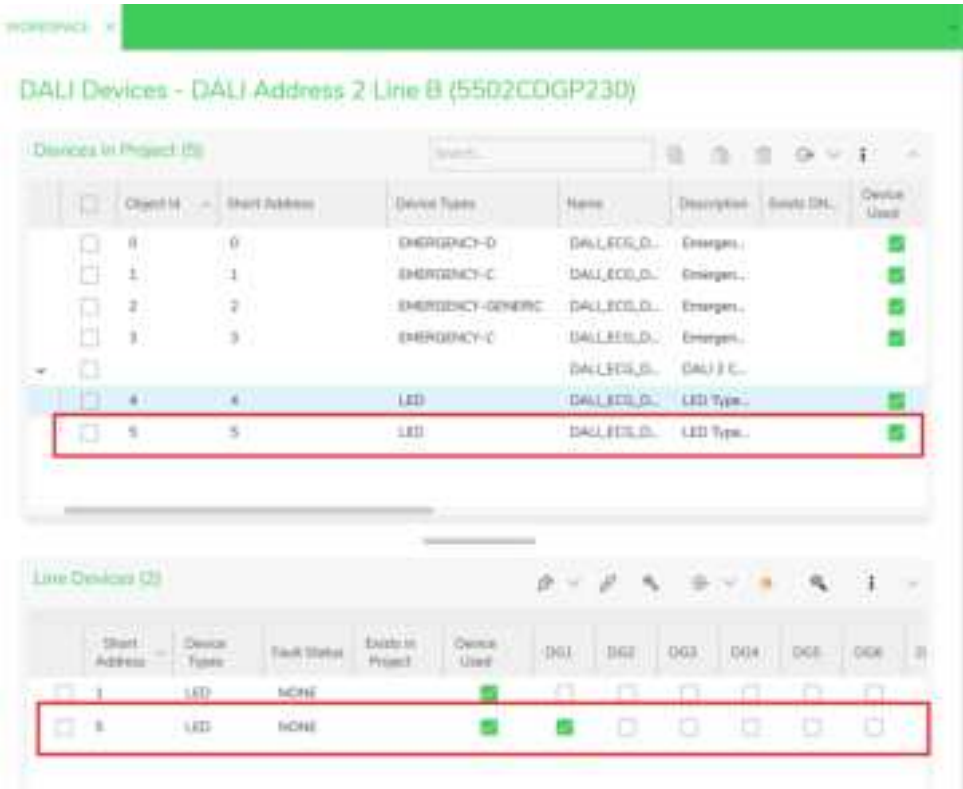
Prerequisites: The selected device must already be reconciled.

The un-reconcile operation allows to release the device from the reconciled state.

Select the device both in **Line devices** section and **Devices in project** section that are already reconciled.



Right click on either sections and select Un-reconcile, the devices get un-reconciled as shown below:

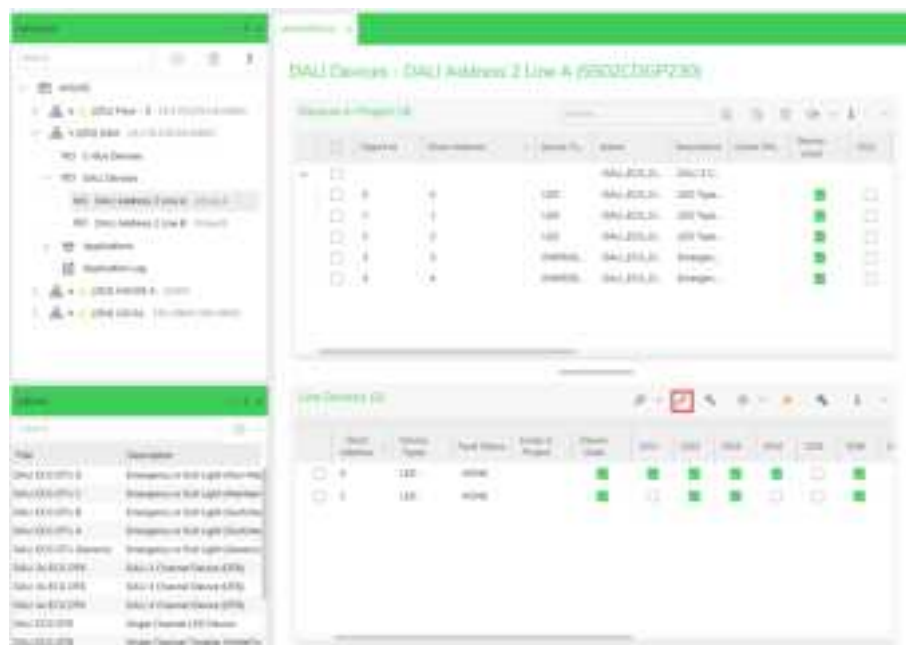


Identify and Reconcile

This method combines the identify and reconcile features into a seamless workflow within a single pop-up window, so that you can complete your task efficiently. It allows you to identify and reconcile the devices to the project directly from a single pop-up window.

Prerequisites: The **Line Devices** must be scanned.

1. Click  in the **Line Devices**.



Identify and Reconcile Line Device pop-up is displayed.



Three sections are defined to identify and reconcile the line devices, they are:

- **Select an unreconciled DALI device from the Line and identify it if required.**
- **Select a Project Device or skip this step to add the line device to a new address in your project.**
- **Select a reconcile option.**

2. Select an **Unreconciled Line Device** and then select the **Identify Method** from the drop-down to identify the device.



- If you select **Auto-identify**, the selected device flashes.
- If you select **Set Device to Max Level**, the selected device is set to maximum level.

IMPORTANT: Once the device selection is changed, the previously selected device remains at its current level.

- If you select **Set Device to Min Level**, the selected device is set to maximum level.
- If you select **Turn Device Off**, the selected device will be turned off.

NOTE: Use keyboard up/down arrows or mouse clicking for device selection. Only one row can be selected at a time.

- To reconcile the project devices, select the line device to reconcile with the project device and then click **Reconcile with Project Device**.

NOTE: The **Reconcile with Project Device** button is enabled only when an unreconciled line device and valid project device are selected.

Identify and Reconcile Line Device

1. Select an unreconciled LDD device from the list and identify it (if required)

Identify Method:

2. Select a Project Device to map this step to add the line device to a new address in your project

From unreconciled devices: ☐

Hide incompatible devices: ☐

3. Select a reconcile option

Reconcile with Project Device:

Hide devices in Project and Reconcile:

Device Address:

Object ID	Object Address	Device Type	Name
1	1	LDD	0001_0001_0001_0001
2	2	LDD	0001_0001_0001_0001
3	3	LDD	0001_0001_0001_0001
4	4	LDD	0001_0001_0001_0001
5	5	LDD	0001_0001_0001_0001
6	6	LDD	0001_0001_0001_0001

In the **Project Devices** table, the reconciled devices are displayed in green and incompatible project device types are displayed in red.

- Select **Hide reconciled devices** check box to hide the reconciled devices from the **Project Devices** table.
- Select **Hide incompatible devices** check box to hide the incompatible devices from the **Project Devices** table.
- The project devices which are a part of multi-channel device are grouped and displayed in expanded/collapsed format.

Identify and Reconcile Line Device

1. Select an unreconciled LDD device from the list and identify it (if required)

Identify Method:

2. Select a Project Device to map this step to add the line device to a new address in your project

From unreconciled devices: ☐

Hide incompatible devices: ☐

3. Select a reconcile option

Reconcile with Project Device:

Hide devices in Project and Reconcile:

Device Address:

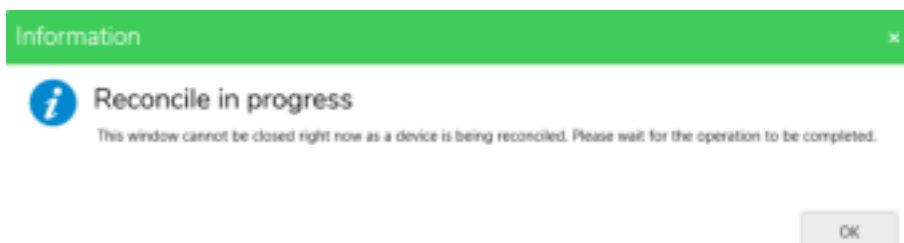
Object ID	Object Address	Device Type	Name
1	1	LDD	0001_0001_0001_0001
2	2	LDD	0001_0001_0001_0001
3	3	LDD	0001_0001_0001_0001
4	4	LDD	0001_0001_0001_0001
5	5	LDD	0001_0001_0001_0001
6	6	LDD	0001_0001_0001_0001

4. If you don't want to reconcile the project devices, you can directly select the **Short Address** from the drop-down and then click **Add Device to Project and Reconcile** to add the device to project and perform reconciliation.

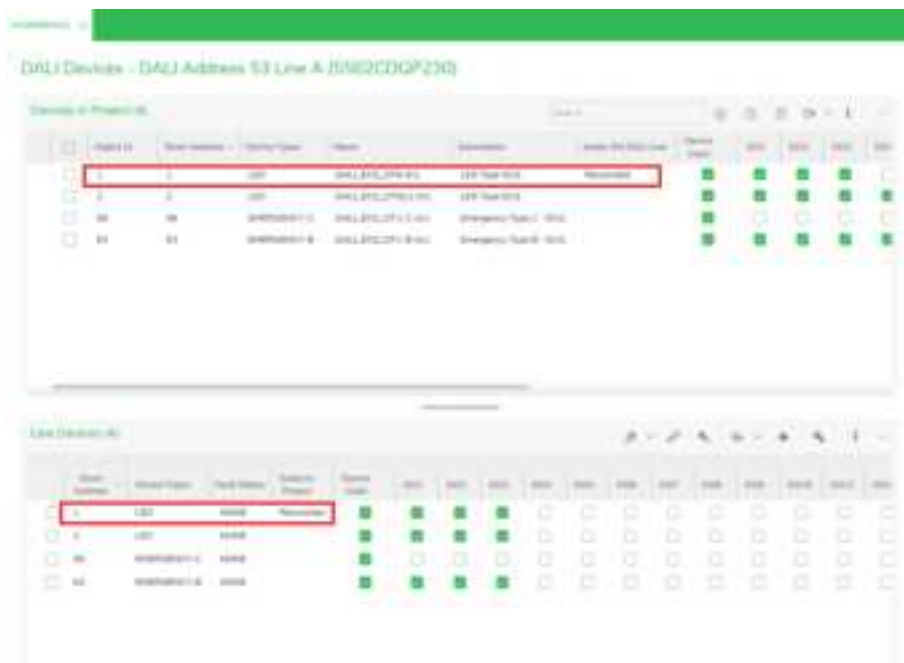


NOTE: Only the available, unused short addresses for the DALI line will be listed in the drop-down.

IMPORTANT: If you try to close the **Identify and Reconcile Line Device** pop-up when reconcile is in-progress, an **Information** pop-up is displayed.



5. Once the required configuration is done, click **Close**. The **WORKSPACE** window refreshes and displays the latest reconciled devices.



Line Devices

The **Line Devices** section displays the DALI ECG that is physically connected to the DALI-2 gateway.

NOTE: To communicate with the Interface, C-Bus Interface must be linked to the C-Bus Network.

Fields	Description
Object ID	Displays the object ID which ranges between 0-63.
Short Address	Displays the short address of the device (the physical device address) that ranges between 0–63.
Device Types	Displays the type of the device.
Faulty Status	Displays the applicable faulty status if the device has any faults.
Name	Displays the name of the device.
Description	Displays the brief description of the device.
Exists in Project	Displays Yes , if device is reconciled with a project device else displays No .
DG (DALI Groups 1–16)	Displays the selected DALI groups for each DALI device which is read-only.
Application	Displays the application address assigned to the selected device.
C-Bus Group	Displays the C-Bus group address assigned to the selected device.

The below operations can be performed in the **Line Devices** section:

- Scan Devices, page 103
- Extract DALI Devices from Network to Project, page 114
- Auto Identify, page 105
- Toggle On/Off, page 106
- Identify, page 108
- Address All Unaddressed, page 109
- Reset All Devices, page 111
- Discover Faults, page 109
- DALI Broken Devices, page 110
- DALI Missing Devices, page 110
- DALI Duplicate Devices, page 111
- Sort DALI Devices, page 112
- Remove Devices, page 113
- Replace Devices, page 114
-

Scan Devices

Prerequisites: The DALI-2 gateway must already be added and DALI line must be selected before scanning.

The scan option identifies the DALI ECG devices connected to the DALI-2 gateway. The following are the scan types:

- DALI Scan
- DALI Device Type Scan
- Read DALI Gateway

DALI Scan

DALI Scan gathers information about DALI devices including their short address, device types, and DALI Group properties.

1. Click  to scan.



2. Navigate to **DEPLOYMENT QUEUE** window to view the DALI scan.

Active (0) Completed (5)			
Activity	Added	Duration	
 Extract DALI2 (7)	9:00:24 PM	7s	
 Scan Gateway 248/7 (EXT_ONLY)	9:00:24 PM	56s	
 Scan DALI Address 7 Line A (DALI SCAN)	9:06:34 PM	13s	

3. You can view DALI Group, DALI Scene, DALI device levels properties (Min, Max, Recovery & Fail) in the **PROPERTIES** window.

DALI Device Type Scan

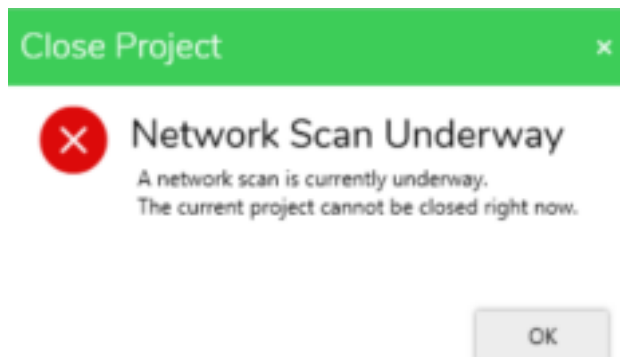
This scan is performed to obtain basic DALI device information such as the short address and device types.

1. To use the DALI Device Type Scan (default scan), click the drop-down and select **DALI Device Type Scan**.



2. You can address all unaddressed devices, discover all devices connected to the DALI gateway, and all missing, duplicate and broken devices.

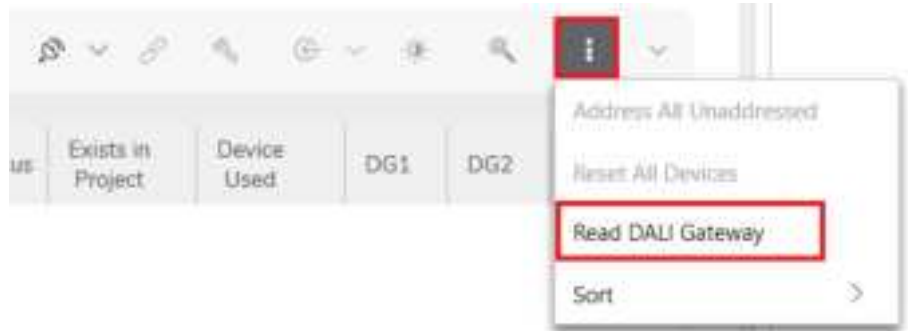
IMPORTANT: Do not close a project while scanning is in progress.



Read DALI Gateway

This scan is performed to read and retrieve the contents of the C-Bus DALI-2 gateway including the programming of both the C-Bus gateway and all DALI devices.

1. Click  and select **Read DALI Gateway** to scan. You can scan both DALI lines, perform DALI device type scan, DALI scan, view serial number and GTIN number, all DALI & C-Bus properties and it allows you to fully extract DALI devices and rebuild the project from scratch.



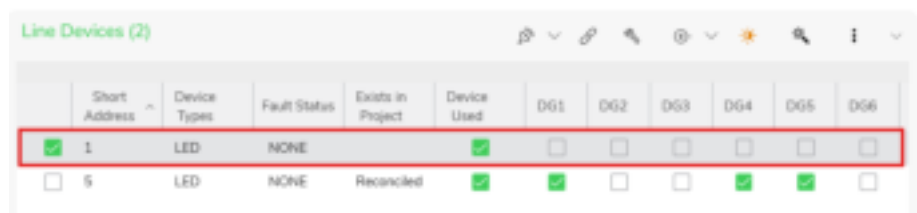
Auto Identify

Prerequisites: The line devices must be scanned.

The Auto Identify function allows you to identify live devices on the line and reconcile them with project devices.

1. Select the device in **Line Devices** and click .

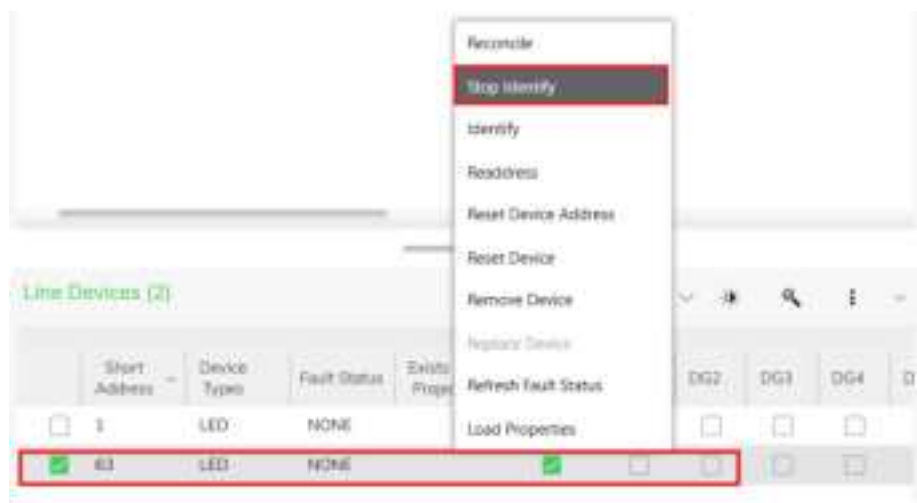
NOTE: The **Auto Identify** icon turns green  when it is ON.



2. Once identified, the physical device begins to flash on and off until it times out or until another device is selected.

NOTE: Emergency devices have a 20 second time-out to stop.

3. To stop a device from identifying, right-click on the device name and select **Stop Identify** from the list.



IMPORTANT: All the devices have a time-out of 30 seconds. You can stop identifying DT6, DT8, and generic device types manually, but you cannot stop DT1 types until their time-out period expires.

- To match the short address of line device and network device, select and right-click the identified device in **Devices in Project** and choose **Reconcile**.

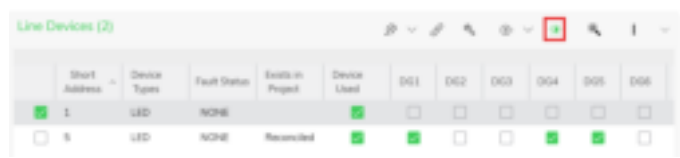
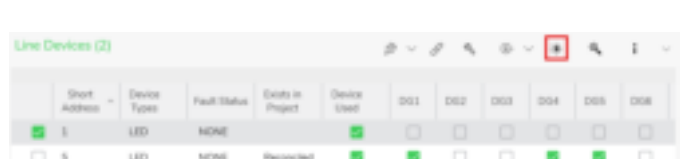


Toggle On/Off

The Toggle On/Off icon is used to adjust brightness, contrast and to control or identify a DALI light on a DALI Line. You can set the device to its maximum or minimum level or turn off, making it easier to locate the light in a room, zone, or an area.

- Select the device in the **Line Devices** section and click .

2. The below table describes the control functions of the toggle button according to the **DALI Setting** in the Main menu. For more information, refer DALI Settings, page 48.

Control Function	Color of Toggle On/Off icon	UI
If you set the button to On at Max Level	Changes to Green	
If you set the button to On at Min Level	Changes to Orange	
If you set the button to Off	Changes to Grey	

NOTE: The keyboard shortcuts are functional only when your working with DALI line devices. Use the below shortcuts keys to control the **Toggle On/Off** icon:

- Press Alt+ M to set maximum level for a DALI device
- Press Alt+ O to OFF the DALI device
- Press Alt+ N to set minimum level for a DALI device

Below are the error scenarios:

- If you click the **Toggle On/Off** icon or use a keyboard shortcut without selecting DALI device from the **Line Devices** section, the following error message appears.



- If you click the **Toggle On/Off** icon after selecting more than one DALI device, the following error message appears.



- If you click the **Toggle On/Off** icon after selecting a DALI emergency device type DT1-C or DT1-D, the following error message appears.



- To set the selected live DALI device to its maximum level, when the **DALI SETTINGS** in the main menu is set to default **Off / On at Max Level**, turn on the **Toggle On/Off** icon.

Line Devices (2)

	Short Address	Device Types	Fault Status	Exists in Project	Device Used	DG1	DG2	DG3	DG4	DG5	DG6
☒	1	LED	NONE		☒	☐	☐	☐	☐	☐	☐
☐	5	LED	NONE	Reconciled	☒	☒	☐	☐	☒	☒	☐

- To turn off the selected DALI device, when the **DALI SETTINGS** is set at **Off / On at Max Level**, turn off the **Toggle On/Off** icon.

Line Devices (2)

	Short Address	Device Types	Fault Status	Exists in Project	Device Used	DG1	DG2	DG3	DG4	DG5	DG6
☒	1	LED	NONE		☒	☐	☐	☐	☐	☐	☐
☐	5	LED	NONE	Reconciled	☒	☒	☐	☐	☒	☒	☐

- To set the selected DALI device to its maximum level (indicated by green), when the **DALI SETTINGS** is configured to **On at Min Level / On at Max Level**, click the **Toggle On/Off** icon while it's in the ON state (indicated by orange).

Line Devices (2)

	Short Address	Device Types	Fault Status	Exists in Project	Device Used	DG1	DG2	DG3	DG4	DG5	DG6
☐	1	LED	NONE		☒	☐	☐	☐	☐	☐	☐
☒	5	LED	NONE	Reconciled	☒	☒	☐	☐	☒	☒	☐

- To adjust the selected live DALI device to its minimum level (indicated by orange), when the **DALI SETTINGS** is configured to **On at Min Level / On at Max Level**, click the **Toggle On/Off** icon while it's in the ON state (indicated by green).

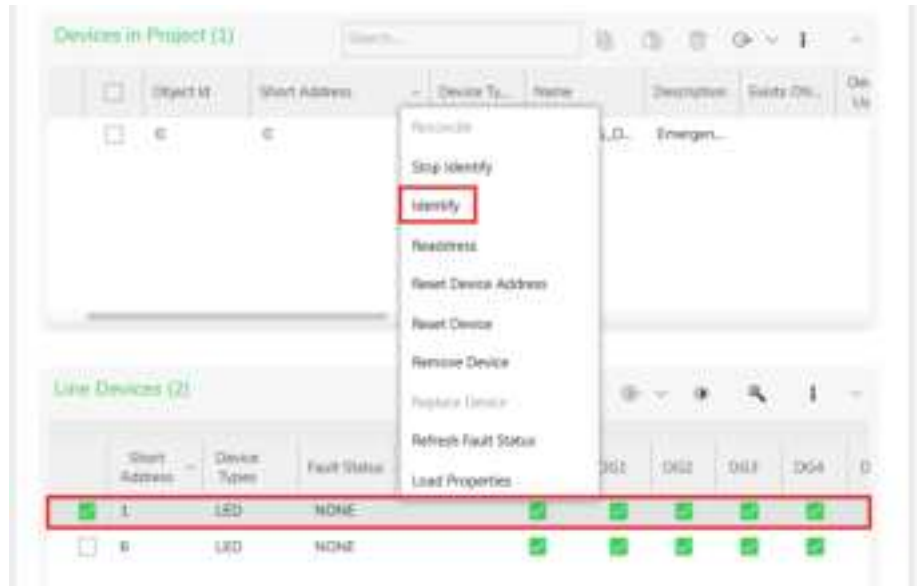
Line Devices (2)

	Short Address	Device Types	Fault Status	Exists in Project	Device Used	DG1	DG2	DG3	DG4	DG5	DG6
☐	1	LED	NONE		☒	☐	☐	☐	☐	☐	☐
☒	5	LED	NONE	Reconciled	☒	☒	☐	☐	☒	☒	☐

Identify

You can identify the device using **Identify** function from the context menu.

1. Select the device in the **Line Devices** section, right-click on it and select **Identify** from the list.



NOTE: If the physical device starts flickering, then the device has been identified.

Address All Unaddressed

When the DALI devices are scanned, the addresses are assigned automatically. If devices on the network do not have an address assigned, you can manually assign the addresses.

1. Select the device in the **Line Devices** section, then click  **Address All Unaddressed**.



Discover Faults

Perform a dedicated scan when a fault condition with devices on a DALI line is suspected, such as short address duplicates, missing devices or broken devices.

To reconfirm that the faulty devices have been resolved, you can perform the Discover Faults.

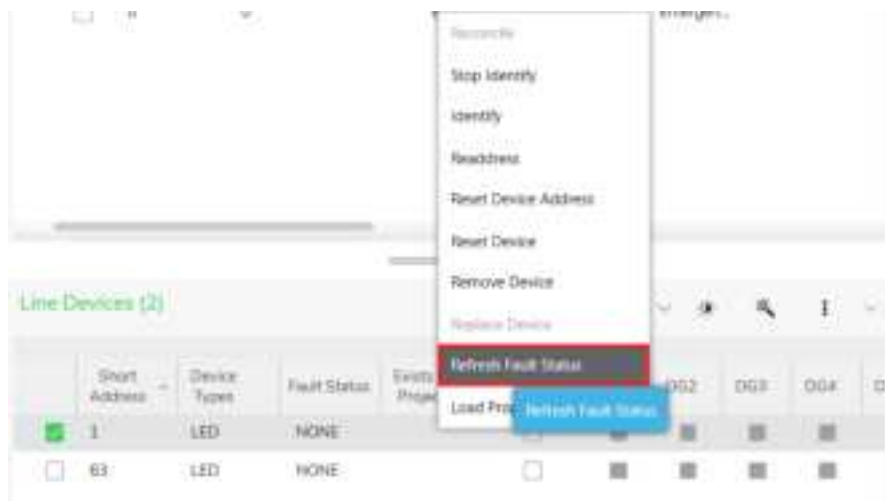
1. Click  in the **Line Devices** section.



NOTE: A DALI device can have multiple fault statuses, which is resolved one at a time. The scanning takes a while depending on the number of devices on the DALI Line.

IMPORTANT: Make sure to fix the faults before refreshing fault status.

- To update the status of fault devices, right-click on the device in the **Line Devices** section and then select **Refresh Fault Status** from the available list of options.



DALI Broken Devices

Physical defects in DALI devices result in a **Broken Device** status. For example, if the battery is removed from an emergency device, it triggers a broken fault status and displays the device as **BROKEN** and highlighted in orange color.

 A screenshot of the 'Line Devices' section showing a table of devices. The table has columns for 'Short Address', 'Device Type', and 'Fault Status'. The second device, with short address 2 and device type EMERGENCY-C, is highlighted in orange and has a fault status of BROKEN. The description for this device is 'Emergency - Control Line Network Emergency Battery Failure'.

Short Address	Device Type	Fault Status	Description
1	LED	NONE	
2	EMERGENCY-C	BROKEN	Emergency - Control Line Network Emergency Battery Failure
3	LED	NONE	
4	EMERGENCY-C	NONE	
5	LED	NONE	
6	LED	NONE	

The broken fault device can be resolved by removing the device from gateway or by connecting the battery back to the device.

IMPORTANT:

- Remove the physical device before removing from **Line Devices** section.
 - or,
 - Fix the broken device and perform the scan again.
- To remove the broken DALI device, right-click on **BROKEN** DALI device and then select **Remove Device** from the available list of options.

IMPORTANT: Make sure all the faults have been resolved before proceeding with the commissioning process.

DALI Missing Devices

When you move the DALI devices from one DALI line to another and scan them in the former line, you discover a DALI missing device.

NOTE: The gateway displays a DALI device as missing if it has not received any response from the device, based on the number of times defined by you in the gateway configuration under each line's *Missing Device Threshold*. By default, the threshold is set to 2. If the gateway receives 2 reports indicating that the device is missing, it displays the device as **MISSING** and highlighted in rose color.

	Object ID	Short Address	Device Type	Fault Status	Name	Description	Exists in Project	Device Used	DG1	DG2	DG3	DG4	DG5
☐	0	0		NONE				☒	☐	☐	☐	☐	☐
☐	1	1		NONE				☒	☐	☐	☐	☐	☐
☒	2	2		MISSING				☒	☐	☐	☐	☐	☐
☐	4	4		NONE				☒	☐	☐	☐	☐	☐
☐	5	5		NONE				☒	☐	☐	☐	☐	☐
☒	6	6		MISSING				☒	☐	☐	☐	☐	☐

You can resolve the missing device issue by either removing the device from the line or replacing it. Once you apply either function and scan again, the discovered DALI device faults will be resolved.

1. To remove the missing DALI device from line, right-click on it and then select **Remove Device** from the available list of options.
2. To replace the missing DALI device from line, right-click on it and then select **Replace Device** from the available list of options.

NOTE: When you discover a missing device, the gateway notifies you by displaying a yellow indicator on the physical gateway device.

IMPORTANT: When replacing the device, ensure that the new device is placed in the same location and connected to the same network as the existing device.

DALI Duplicate Devices

When two DALI devices have the same short address, scanning the DALI line results in DALI duplicate devices. You can resolve this duplicate device issue by resetting one of the devices. Duplicate devices are displayed as **DUPLICATE** and highlighted in pale yellow color.

	Object ID	Short Address	Device Type	Fault Status	Name	Description	Exists in Project	Device Used	DG1
☐	0	0	EMERGENCY	DUPLICATE (Short Address Conflict)				☒	☐
☐	0	0	EMERGENCY	DUPLICATE (Short Address Conflict)				☒	☐
☐	4	4	EMERGENCY	NONE				☒	☐
☐	4	4	LED	NONE				☒	☐
☐	5	5	LED	NONE				☒	☐

1. To reset a duplicate device, right-click on it and select **Reset Device** from the available list of options.
2. Once reset is done, re-scan the DALI line to discover the reset device.

NOTE: The reset device will reset the short address and Object ID, and it will clear the device from the gateway memory. However, it does not reset the DALI group or DALI scene configurations.

Reset All Devices

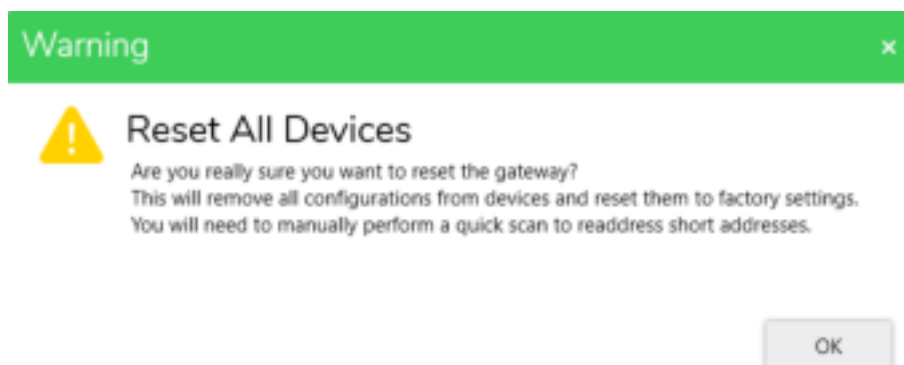
All DALI devices in the **Line Devices** section can reset their short addresses at the same time.

1. Select  > **Reset All Devices**.



NOTE: Reset All Devices function will reset all the short address and object ID, and it will clear the device from the gateway memory but does not reset the DALI group or DALI scene configurations.

2. A **Warning** pop-up appears. Click **OK** to proceed.



3. To perform an individual short address reset for a DALI device, select the DALI device in the **Line Devices** section. Right-click on it and then select **Reset Device** from the available list of options..

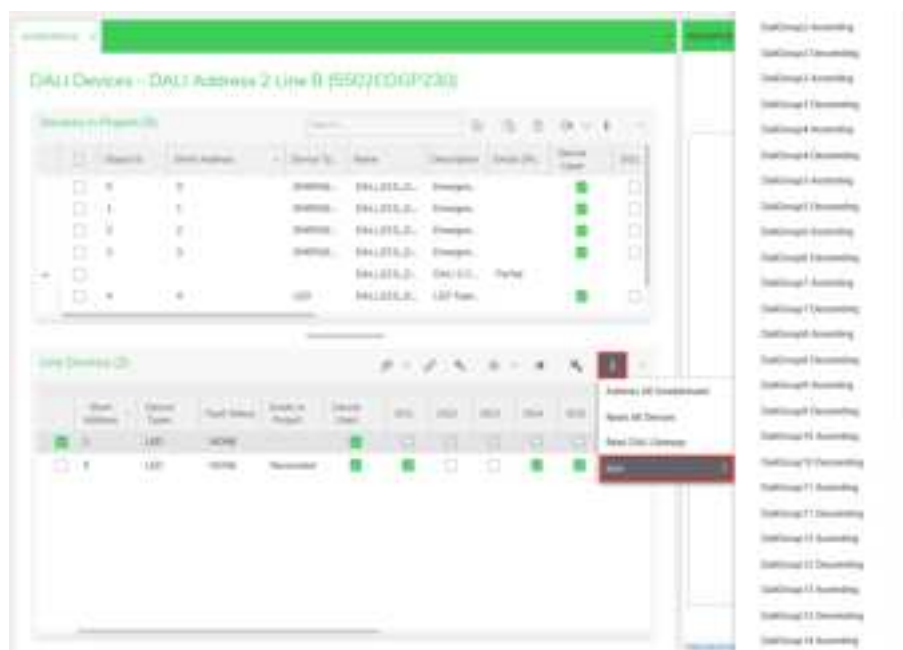


NOTE: After resetting the device(s), the reset device function will perform either a DALI Device Type Scan or DALI Scan.

Sort

Prerequisites: The DALI gateway and DALI devices must already be added in the network.

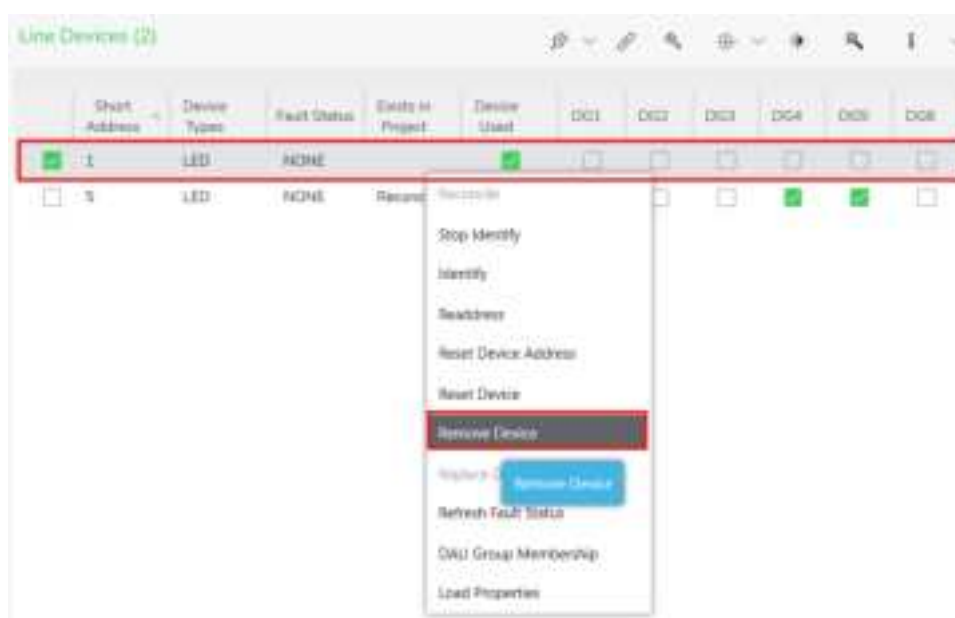
1. To sort the DALI devices in the live network, click  > **Sort** and then select an appropriate sort method.



Remove Device

When the DALI faults are discovered, the faulted devices can either be removed or replaced.

1. To remove the faulted DALI device, select and right-click on the DALI device in **Line Devices** section, and then select **Remove Device** from available list of options.



NOTE: Perform DALI Device Type Scan or DALI Scan after removing the device(s).

Replace Device

When the DALI faults are discovered, the faulted devices can either be removed or replaced with the new DALI devices which gets assigned with new short addresses.

1. To replace the faulted DALI device, select the DALI device in **Line Devices** section, right-click on it and then select **Replace Device** from the available list of options.

NOTE: Perform DALI Device Type Scan or DALI Scan after replacing device (s).

To Extract DALI devices from Network to Project

Prerequisites: Ensure DALI-2 gateway device is already added to the network and DALI line is selected. A full DALI line scan has to be performed.

TIP: Reconciliation can also be done either by 50/50, page 94 process or by manually.

1. Scan the selected DALI line in the **Line Devices** section.
2. Select the DALI device that needs to be transferred from network to project.

IMPORTANT: If the DALI device is selected from the **Project** section, make sure the short address of the DALI device is same in both project and network. If not, readdress the device to match the same.

3. Click  in the **Line Devices** section.

DALI Devices - DALI Address 2 Line A (5502CDGP230)

Devices in Project (4)										
	Object ID	Short Addr.	Device Ty.	Name	Description	Exists On...	Device Used	DG1	DG2	D3
				DALLECO.D.	DALI 2 C...	Peripat				
☐	0	0	LED	DALLECO.D.	LED Type...		☒			
☐	1	1	LED	DALLECO.D.	LED Type...	Reconciled	☒			
☐	2	2	LED	DALLECO.D.	LED Type...	Reconciled	☒			☒
☐	3	3	EMERGE...	DALLECO.D.	Emergen...		☒			
☐	4	4	EMERGE...	DALLECO.D.	Emergen...		☒			

Live Devices (2)										
	Short Address	Device Type	Fault Status	Exists in Project	Device Used	DG1	DG2	DG3	DG4	DG5
☐	0	LED	NONE		☒	☒	☒	☒	☒	☒
☐	2	LED	NONE	Reconciled	☒		☒	☒		☒

NOTE: Transferring all the DALI devices together from network to project can also be performed using **Extract All To Project** (📁 drop-down) in the **Line Devices** section.

DALI Devices - DALI Address 2 Line A (5502CDGP230)

☐	Object Id	Short Add...	Device Ty...	Name	Description	Exists ON...	Device Used	DG1	DG2	DG3	DG4	DG5	DG6
☐				DALI_ECG_D...	DALI 2 C...	Reconciled							
☐	0	0	LED	DALI_ECG_D...	LED Type...	Reconciled	☒	☒	☒	☒	☒	☒	☒
☐	1	1	LED	DALI_ECG_D...	LED Type...	Reconciled	☒	☐	☐	☐	☐	☐	☐
☐	2	2	LED	DALI_ECG_D...	LED Type...	Reconciled	☒	☐	☒	☐	☐	☐	☐
☐	3	3	EMERGE...	DALI_ECG_D...	Emergen...		☒	☐	☐	☐	☐	☐	☐
☐	4	4	EMERGE...	DALI_ECG_D...	Emergen...		☒	☐	☐	☐	☐	☐	☐

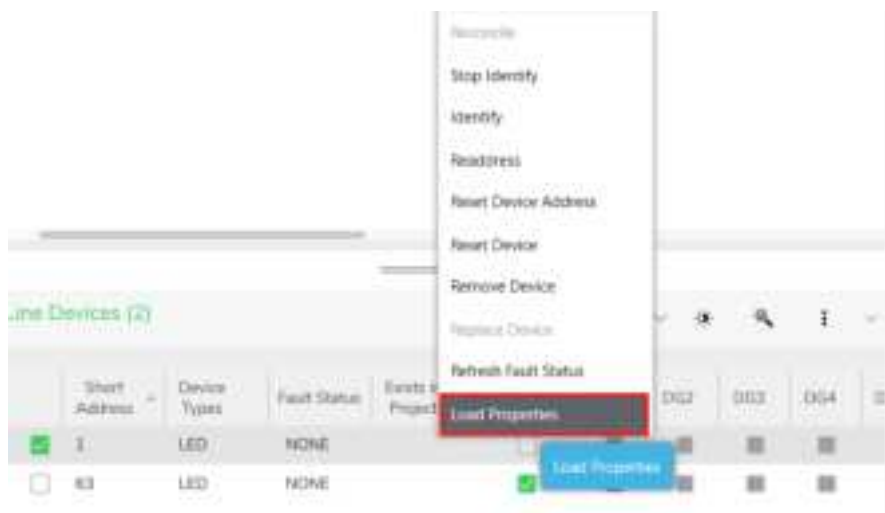
☐	Short Address	Device Types	Fault Status	Exists in Project	Device Used	DG1	DG2	DG3	DG4	DG5	DG6
☐	0	LED	NONE	Reconciled	☒	☒	☒	☒	☒	☒	☐
☐	2	LED	NONE	Reconciled	☒	☐	☒	☒	☐	☐	☒

Load Properties

Commissioning DALI devices can be done by setting their properties.

1. Select the device in the **Line Devices** section.

2. Right-click on the device and then select **Load Properties** from the available list of options.



The properties of the selected device is displayed in the **PROPERTIES** window.

The 'PROPERTIES' window has a green title bar. It contains a 'Name' text box and a 'Type' dropdown menu set to 'DALI Channel'. Below this is a 'Control Mapping' section with a list of 13 DALI Group Membership items, each with an unchecked checkbox. At the bottom, there is a 'Device Used' section with the text 'Selects whether device is used in DGW' and a 'Save to Project' checkbox. At the very bottom are 'Save' and 'Cancel' buttons.

Control Mapping	
DALI Group 1 Membership	☐
DALI Group 2 Membership	☐
DALI Group 3 Membership	☐
DALI Group 4 Membership	☐
DALI Group 5 Membership	☐
DALI Group 6 Membership	☐
DALI Group 7 Membership	☐
DALI Group 8 Membership	☐
DALI Group 9 Membership	☐
DALI Group 10 Membership	☐
DALI Group 11 Membership	☐
DALI Group 12 Membership	☐
DALI Group 13 Membership	☐

Device Used
Selects whether device is used in DGW

☐ Save to Project

Save Cancel

Properties Window

This window displays C-Bus and DALI device properties where the name and type of the device can be updated. This also allows the user to configure different operational features for C-Bus and DALI devices added to each network.

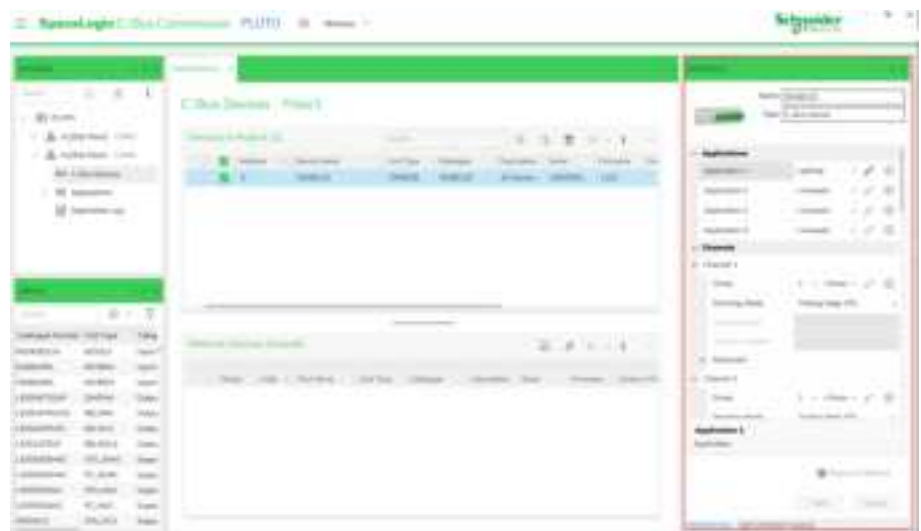
TIP: The properties of any units can also be loaded using **Load Properties in Network Device/Line Device (for DALI devices)** section of **WORKSPACE** window.

To View/Edit C-Bus Device Properties

Prerequisites:

- A project must be open in the SpaceLogic C-Bus Commission software. The C-Bus devices must already be added to a **Devices in Project** of a network.
 - This section displays the name and type of the C-Bus device. The name of the C-Bus device can be renamed and also allows you to configure different operational features for C-Bus devices added to each network.
1. Select a Network from the project.
 2. Click **C-Bus Devices** of a network.
 3. Select a C-Bus unit device from **Devices in Project**.

Step result: The selected C-Bus device properties are displayed in the **PROPERTIES** window.



NOTE: The fields in the device properties can be modified as per the project requirement.

To View/Edit DALI Device Properties

Prerequisites:

- A project must be open in the SpaceLogic C-Bus Commission software. The DALI gateway and DALI device must already be added to a **Devices in Project** of a network (Adding DALI Gateway is similar to adding any C-Bus device).
- This section displays the name and type of the DALI device. The name of the DALI device can be renamed and also allows the user to configure different operational features for DALI devices added to a DALI line in each network.

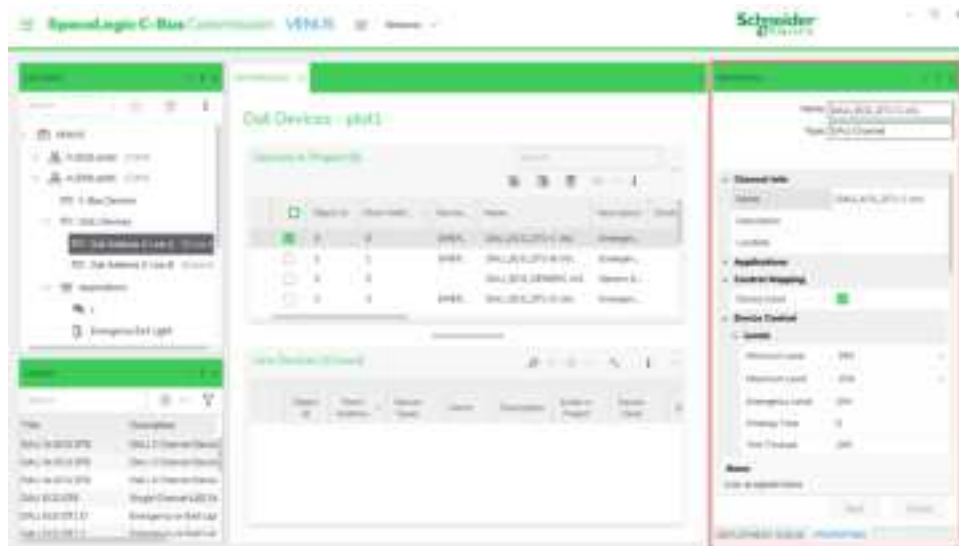
1. Click DALI devices drop-down in the **EXPLORER** window.

NOTE: DALI devices are visible only when DALI Gateway is added from **LIBRARY** window to **Devices in Project** of **WORKSPACE** window.

2. Choose a DALI line.

3. Select a DALI device from **Devices in Project** from **WORKSPACE** window.

Step result: The selected C-Bus device properties are displayed in the **PROPERTIES** window.



NOTE: The fields in the device properties can be modified as per the project requirement.

Deployment Queue

The Deployment Queue displays the status of devices that are being extracted to *Devices in Project* and configured devices that are being deployed to the hardware. The devices can be identified in the physical device configuration.

Prerequisites: The network must already be created in project. *Devices in Project* must have been fully matched with *Network devices*.

The Deployment Queue allows reconciliation of the *Devices in the Project* and the network. The reconciled devices can then be deployed to the network. This Queue also allows searching for a device, by entering the device name, part number or description fully or partly in the search bar.



To Deploy any device once the configuring is completed, **Save** the settings and check *Deploy to Network*. or after saving the settings click  on *Devices in Project* section.

To remove the *Deployed* devices based on Waiting, Failed, Completed Click  drop-down.

The Deployment Queue consists of following tabs:

- **Active**
This tab consists of devices that are currently active in deployment process.
- **Completed**
This tab consists of devices that has finished the activity in deployment queue..

Field	Meaning
Activity	This field displays the activity of the unit device, whether the Unit device is being extracted or being deployed.
Added	Displays The time unit device was added to deployment queue.
Duration	Displays the time taken for the activity
Message	Displays the message whether the activity was failed, successful or Done.
Target Network	Displays the network through which the unit device was deployed.

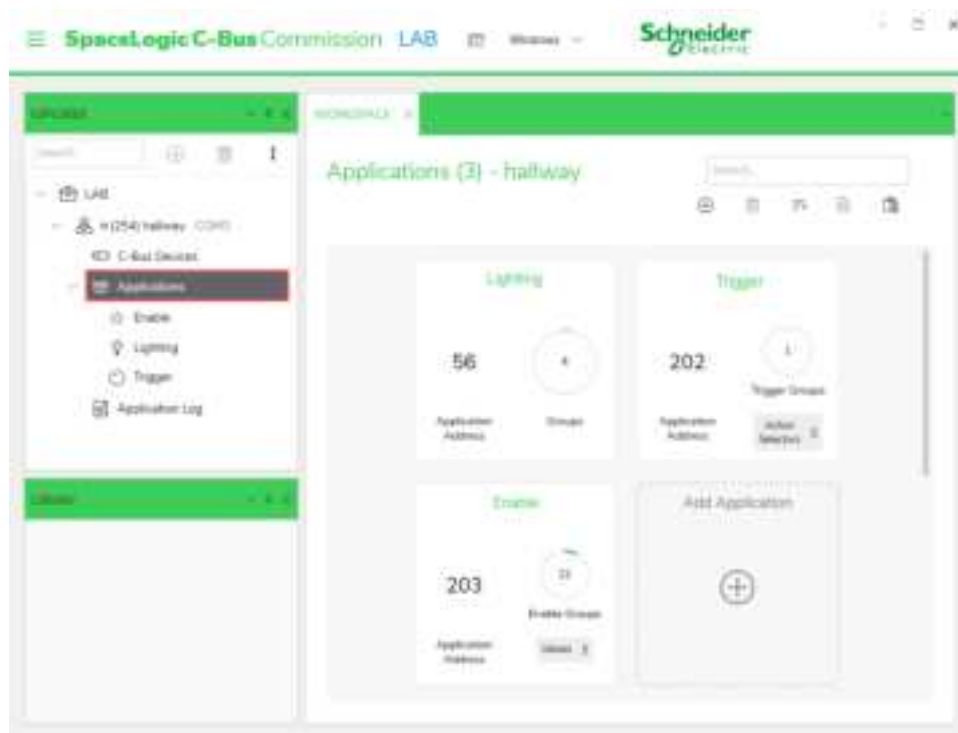
IMPORTANT: When Deployment activities are in progress performing following actions are not possible:

- Closing a network
- Switching between the projects
- Closing a project
- Exiting an application or software

C-Bus Applications

The Application section window allows the management of the applications within a network. An application is used with a **Group Address** to define the relationship between devices. Example: which input(s) will control which output(s).

NOTE: C-Bus Application section is displayed in the **Workspace** window.



NOTE: Lighting, Trigger and Enable are the default applications added to all the networks in a project.

Application	Decimal	Hexadecimal
Lighting	56	38
Enable	203	CB
Trigger	202	CA
Error	206	CE
Measurement	228	E4
Emergency Exit Light	238	EE
Audio	205	CD
Media Transport	192	CO

Operations on C-Bus applications:

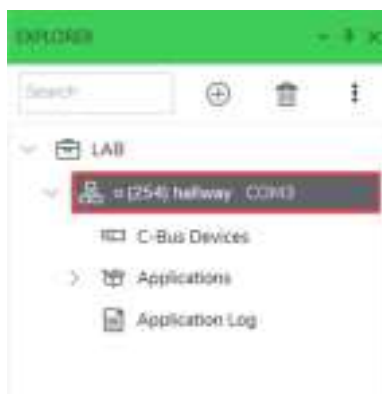
- Add application, page 121
- View application content, page 122
- Edit application, page 123
- Copy-paste application, page 124
- Search application, page 125
- Sort applications, page 126
- Delete application, page 126

Add Applications

The *Applications* section allows the user to add an application to a network.

Prerequisites: A network must already be created in a network .

1. Select a network from the **Explorer** window



2. Click  Applications



Step result: The Application section is displayed in the **Workspace** window.

3. Click  Add Applications in the **Workspace** window

4. Fill in the Mandatory fields

Click **Create**

An Application is created Successfully.



View content of an Application

Prerequisites: A network must already be created in a network and application must be existing.

1. Select a network in the **EXPLORER** window.

- Click  drop-down.



All the applications in the network are displayed.

NOTE: By default Lighting, Enable and Trigger applications are listed.

- Select the application to view content



The content of the **Applications** is displayed.

Edit Application

Prerequisites: A network must already be created in a network and application must be existing.

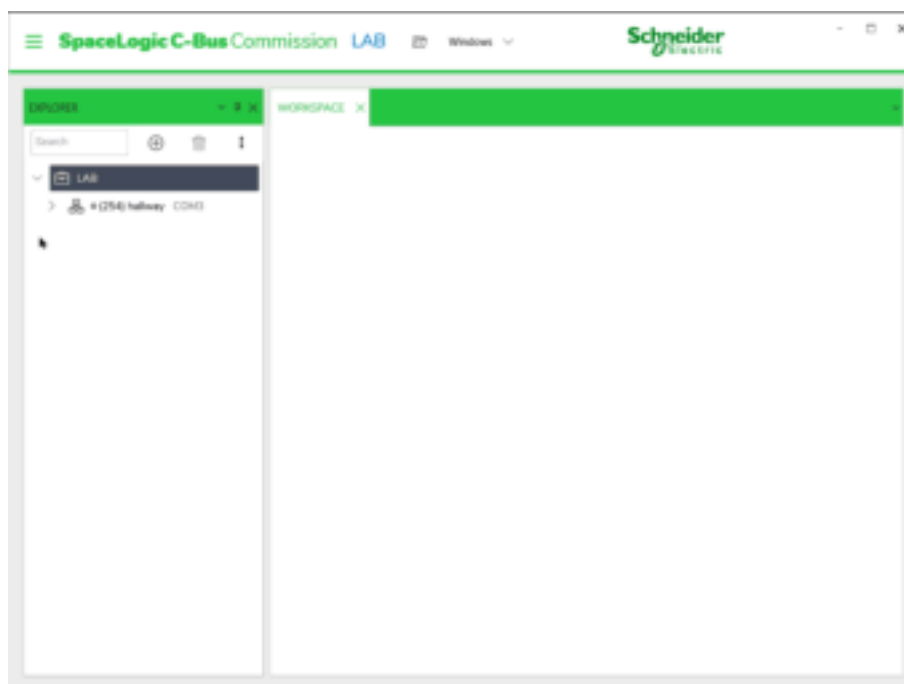
The edit application feature allows the user to modify the description of the application.

- Select a network in the **EXPLORER** window.
- Select an **Application**.

NOTE:

- The default applications cannot be edited.
- Only Name and Description of an application can be modified.

3. The process to edit an application is demonstrated below:



The application is modified.

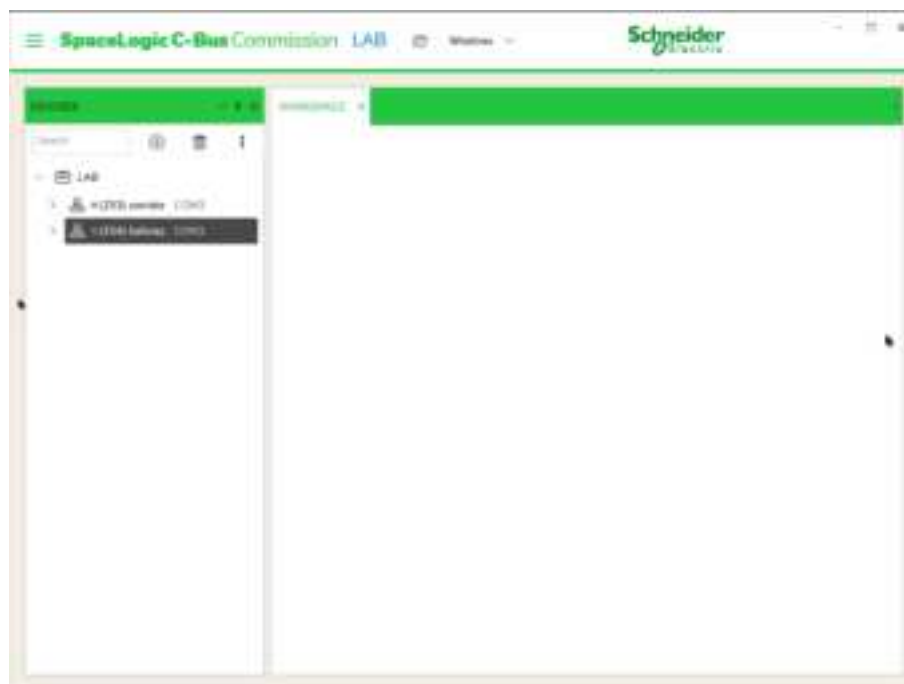
Copy and Paste an Application

The SpaceLogic C-Bus Commission software allows the user to copy and paste the contents of an application from one network to another.

Prerequisites: A network must already be created in a network and an application must already be added in a network.

1. Select a network from the **EXPLORER** window (a network from which an application has to be copied).
2. Click . The process to copy and paste an application is demonstrated below:

3.



The content of the application is copied from one network and pasted in another network.

NOTE: Performing paste operations on reserved applications and modifying their names are not allowed. Attempting the function will display the **Resolve Conflict** window, where neither the address nor the name can be modified.

Search an Application

The application section allows the user to search for an application or contents inside the application

Prerequisites: A network must already be created in a network and application must be existing.

1. Select a network in the **Explorer** window
2. Enter the application name in the search bar

NOTE: This feature can also be used to search group addresses inside an application.



If the search word includes the application name then the resulting applications that match will be displayed. If the search word includes a group address name then the resulting applications where that group address name exists will be displayed.

Sort Applications

Prerequisites: A network must already be created in the project and more than one application must be existing in a network.

The existing applications can be sorted using .

Choose an appropriate option.

Delete an Application

The SpaceLogic C-Bus Commission software allows the user to delete an application in the network.

Prerequisites: A network must already be created in a network and application must be existing.

1. Select a network from the **Explorer** window
2. Click  Applications
3. Select an application from the **workspace** window to be deleted in the network



4. Click 

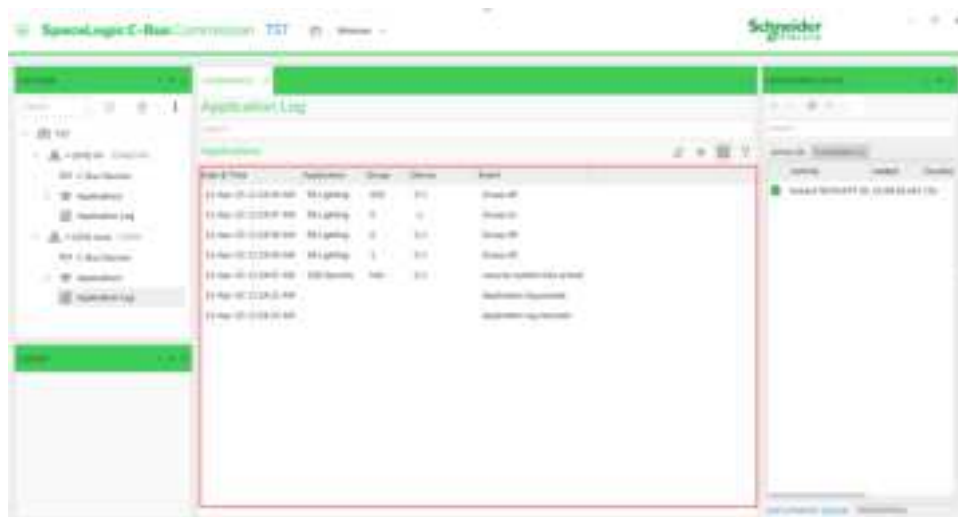
The application is deleted from the network.

Application Log

Prerequisites: The network must already be created.

Application Log displays the communications performed in an open network. This window also allows searching for a device, by entering the device name, part number or description fully or partly in the search bar.

When a network is being used, applications and their devices generate log events which are displayed in the **Application Log**.



Fields	Description
Date & Time	This field refers to the date and time for the log entry.
Application	This field refers to the application type of the log.
Group	This field specifies the address of the application group that has generated the log entry.
Device	This field provides information about the unit that issued the message.
Event	This field provides information about the status or event which the entry is logging. The event information varies with the type of application.

Operation performed on application log:

- Search Bar- Keyword search for the existing log entries..
-  - Filter by application, group and device addresses.
-  - Save the application log.
-  - Pause/Play the application log.
-  - Erase the application log events.

Lighting Application

The lighting applications are responsible for controlling electrical loads for a wide range of automation operations.

The Lighting application contains functions for editing the application and related lighting compatible groups. Each of the Group and Level entries contains information in the fields.

When a network is created in project, the **Lighting** application is created by default with an application number 56 and ranges from 48 to 127 (applicable while creating new lighting application).



For more details, click:

- Groups, page 128
- Levels, page 133

Groups

A Group Address is used to make associations between the key of an **Input Unit** and the channel of an **Output Unit**. They are assigned to output and input units to commission the devices for controlling the same object.

NOTE:

- A number of C-Bus Output Unit channels can be controlled by a single key on a C-Bus switch (with the same Group Address).
- A number of keys on different Input Units can control the same load, by giving them all the same Group Address.

There are 255 Group Addresses (0 to 254) in an Application Address.

SpaceLogic C-Bus allows the creation up to 255 different Group Addresses on each Application Address.

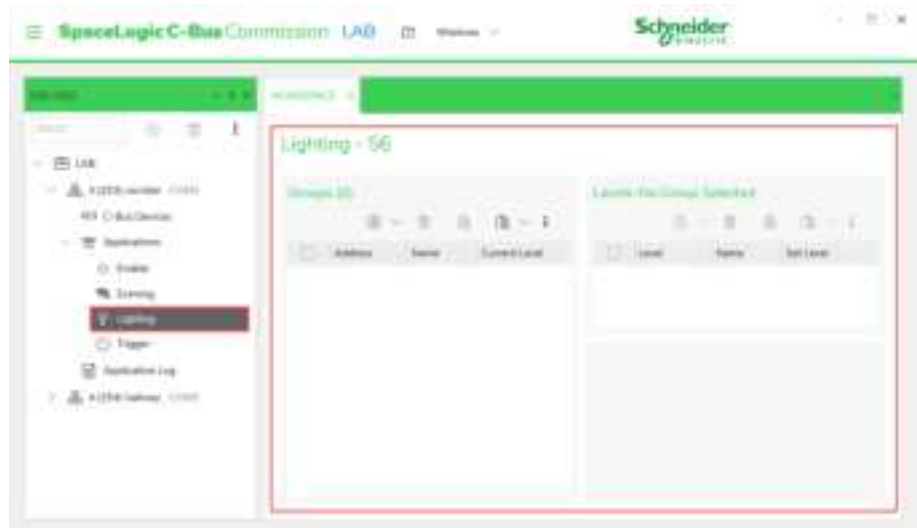
Operations performed on groups:

- Add groups, page 129
- Edit groups, page 132
- Copy groups, page 130
- Paste groups, page 130
- Sort groups, page 132
- Delete groups, page 133

Add Groups

Prerequisites: The network must already be created in a project.

1. Select a network from the **Explorer** window
2. Click  Applications drop-down
3. Select *Lighting*



Step result: Respective Groups and levels section of Lighting is displayed in the **Workspace** window.

4. Click  in the Groups section.
5. Choose address

Step result: A Group is created.

TIP: Multiple groups can be created at a time as demonstrated below:



Copy Groups

The Group Addresses in an application can be aligned/arranged with same addresses as in the other application.

Pre requisites: The Group Addresses must already be added in an application.

In a multi-network project the Group Addresses of an application on a network can communicate with Group addresses of an application on other network via a C-Bus bridge.

1. Click *Lighting* application.
2. Select the group check box to be copied in the *Groups* section .

NOTE:

- A single group can be chosen by selecting the check box of the required group, whereas all groups can be chosen by selecting the check box on the top.
- The copy  option will be disabled, if a group is not selected.

3. Click  in the *Groups* section of lighting application.

NOTE: To copy the complete application, click  in the application section.

Step result: The selected Group Addresses are copied.

Paste Group

Prerequisites: The Group Address must be copied from an application to another network or to the same network.

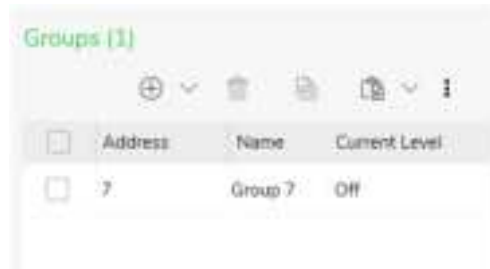
The application Group Addresses copied from one network can be pasted to an another application in different network. The complete application copied from one network can also be pasted to an another network.

NOTE: The lighting application Group Address copied from one network can be pasted into the lighting application on another network only.

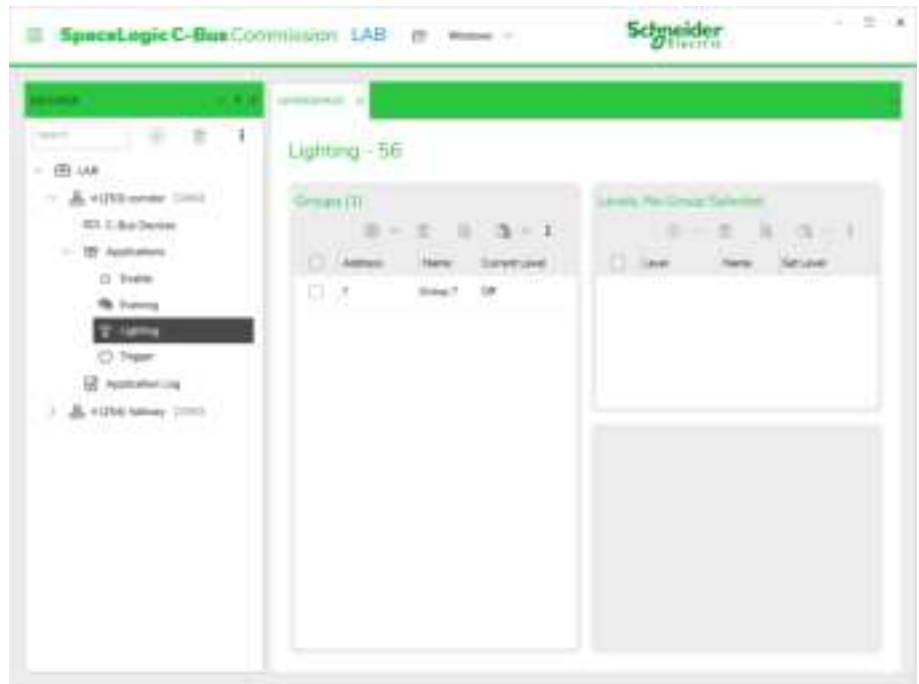
1. Open the **Groups** section of Lighting application.

NOTE: Paste the Group Address in lighting application of an another network.

2. Click  in the **Group** section of a lighting application.



NOTE: The process to Paste the **Group Address** from excel is as demonstrated below:



IMPORTANT: Paste conflict occurs when already existing group name and group address are been pasted.

The process to **Resolve conflict** is as demonstrated below:



Edit Groups

Prerequisites: Make sure you have selected *Lighting* application and group has been created.

1. Double-click on the group name that has to be edited/renamed



Step result: Edit Group Dialog box is displayed.

2. Edit the Group name and click OK



NOTE: Special characters except /, ", # and maximum of 32 characters in the group name is acceptable.

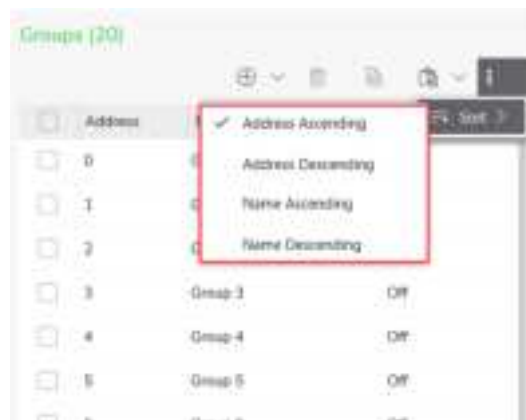


Step result: The Group name is updated.

Sort Groups

Prerequisites: The groups must already been created in Lighting application.

The existing Groups in application can be sorted using  in the group section of lighting application.



Choose appropriate sort method.

Delete Groups

The delete option allows the user to delete one or more *Group Addresses* from a Lighting application.

Prerequisites: The Groups must already be created in *Lighting* application.

1. Select the *Groups* check box

NOTE: One or more *Group Addresses* can be selected

2. Click  in the groups section
3. Confirm **Yes** in the **Confirmation** dialog box.

Levels

The *Level* is the value of the *Group Address* network variable.

Every *Group Address* has 256 steps between OFF (0 and 0%) and ON (255 and 100%). These 256 steps are referred to as Levels.

Levels are referred differently in different *C-Bus Applications*.

When the *Group Address* is on the *Trigger Application* or *Enable Application*, the 256 steps in a *Group Address* are referred to as *Action Selectors* and *Values* respectively.

Levels and *Action Selectors* are most commonly used to trigger an event like a scene.

Operations performed on Levels are:

- Add levels, page 133
- Copy levels, page 135
- Paste levels, page 135
- Edit levels, page 137
- Sort levels, page 137
- Delete levels, page 138

Add Levels

Prerequisites: The *Group* must already be created/added in the lighting application

1. Select a *Group* in the group section



NOTE: If a group is not selected, the $\oplus$ will be disabled.

2. Click $\oplus$ in Levels section



Step result: Single Level is added for a selected group.

3. The steps to Add Multiple Levels for a single group at a time is as demonstrated below:



Step result: Multiple Levels are created.

4. Level Name can be edited as demonstrated below:



Step result: Level Name is updated.

Copy Levels

Prerequisites: The *Levels* must already be added in a *Group*.

The levels created in a group can be copied from the other group in the same lighting application on same network or from the lighting application from different network in the project.

1. Select the group

Step result: The *Levels* in the selected *Group* are displayed.

2. Select the required levels and click  of *Levels* section.

Step result: The selected levels are copied.

Paste Levels

Prerequisites: The *Levels* must already be copied from a selected Group.

The Paste Level option allows the user to paste the Levels copied from one group into different group on the same network or into a Group on another network.

1. Select the Group in the group section of the network to be pasted in



NOTE: **Levels** can either be pasted on same network or into a **Group** on another network.

2. Click  in the **Levels** section.



NOTE: The Process to Paste **Levels** from Excel is as demonstrated below:



Step result: The copied **Levels** are pasted.

IMPORTANT: Paste conflict occurs when already existing level name and level address are been pasted in lighting application of another network.

The process to **Resolve conflict** is as demonstrated below:



Edit Levels

Prerequisites: The Levels must already be existing in the selected group of Lighting application.

1. Double-click on the level name that has to be edited/renamed



Step result: Edit Group Dialog box is displayed.

2. Edit the Level name and click OK.



NOTE: Special characters except /, ", # and maximum of 32 characters in the group name is acceptable.

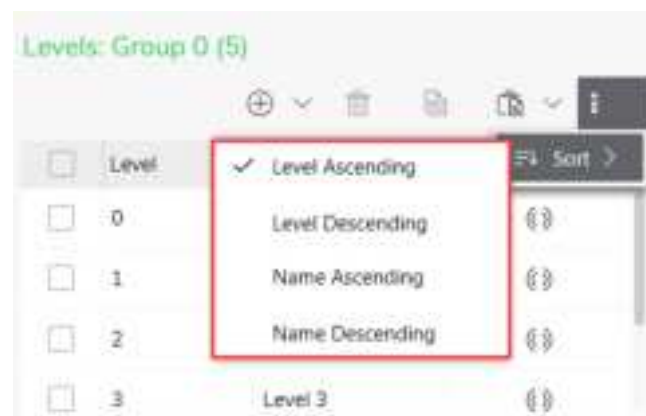


Step result: The level name is updated.

Sort Levels

Prerequisites: The created Group has to be selected in the Lighting application.

The existing Levels in application can be sorted using  in the level section of lighting application.



Choose appropriate sort method.

Delete Levels

The delete option allows the user to delete one or more levels added to a group address.

Prerequisites: The *Levels* must already be added in the *Group Address*.

1. Select a group address in *Groups* section

NOTE:  in *Levels* section will be disabled.

2. Select the *Levels* to be deleted and click  in the *Levels* section.
3. Confirm **Yes** in the **Confirmation** dialog box.

Step result: The selected levels are deleted.

Trigger Application

The Trigger application is widely used across C-Bus to trigger actions or events such as C-Bus lighting scenes or to start an irrigation program.

The Trigger application contains functions for editing the application and related trigger compatible trigger groups. Each of the Trigger Group and Action selector entry contains information in the fields.

When a network is created in project, the *Trigger* application is created by default with an application number 202.

The *Trigger* application is widely used across C-Bus to trigger actions or events such as C-Bus lighting scenes or to start an irrigation program.

The Trigger application is viewed similar to lighting application, [click here](#)

For more details, click:

- [Trigger group, page 139](#)
- [Action selector, page 142](#)

Trigger groups

A Trigger application within a network has 0 through 254 Trigger Groups available for C-Bus programming.

There are 255 Group Addresses (0 to 254) in an Application Address. SpaceLogic C-Bus allows the creation up to 255 different Group Addresses on each Application Address

Operations performed on Trigger groups:

- [Add Trigger group, page 139](#)
- [Copy Trigger group, page 140](#)
- [Paste Trigger group, page 141](#)
- [Edit Trigger group, page 141](#)
- [Sort Trigger group, page 141](#)
- [Delete Trigger group, page 142](#)

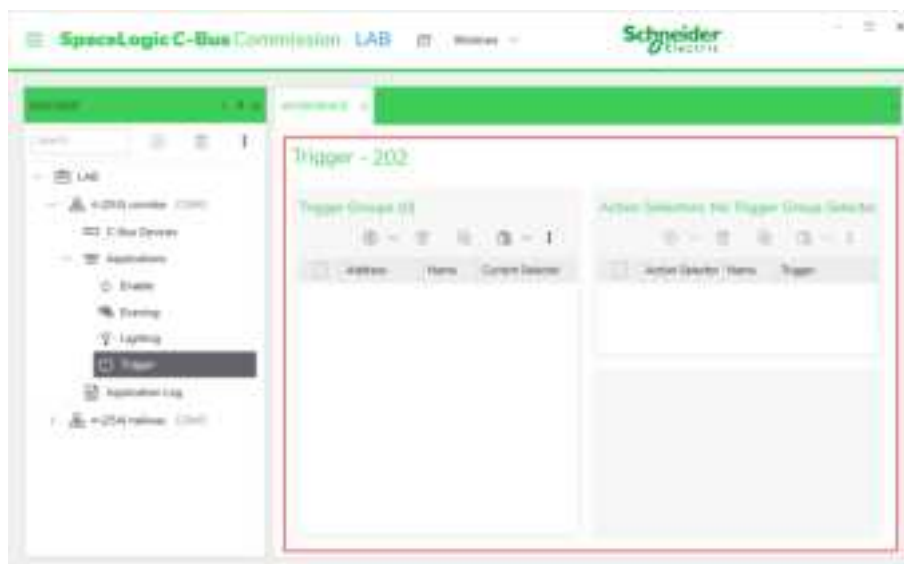
Add Trigger Groups

The C-Bus Application section allows the user to add Trigger Groups to an Trigger Application.

Prerequisites: The Trigger application must be selected in a created network.

1. Select a network from the **Explorer** window
2. Click  Applications drop down

3. Select *Trigger*



Step result: Respective *Trigger Groups* and *Action Selectors* section of *Trigger* is displayed in the **Workspace** window.

4. Click  in the *Trigger Groups* section
5. Choose address

Step result: A Group is created.

The process to create multiple trigger groups at a time is similar to as demonstrated in lighting application, [click here](#)

Copy Trigger Groups

In a multi-network project the *Trigger Group Addresses* of an *Trigger* application on a network can communicate with *Trigger Group addresses* of a *Trigger* application on another network via C-Bus bridge.

Prerequisites: The Trigger Group Address must be already created in an application.

The *Trigger Group Addresses* in the *Trigger* application can be aligned/arranged with same addresses as in the other *Trigger* application.

1. Click *Trigger* application
2. Select the group check box to be copied in the *Trigger Groups* section

NOTE:

- A single group can be chosen by selecting the check box of the required group, whereas all groups can be chosen by selecting the check box on the top.
- The copy  option will be disabled, if a group is not selected.

3. Click  in the *Trigger Groups* section of *Trigger* application

NOTE: To copy the complete application, click  in the application section.

Step result: The selected trigger groups are copied.

Paste Trigger Groups

The *Trigger* application *Group Addresses* copied from one network are pasted either into another *Trigger* application in same network or in a different network.

Prerequisites: The Trigger Group Address must be already copied from an application.

NOTE: The *Trigger* application *Group Address* copied from one network must be pasted only into the trigger application on another network.

1. Select the *Trigger Groups* in the *Trigger* application of the network to be pasted in.

2. Click  in the *Trigger Group* section.

NOTE: The process to Paste the *Trigger Groups* from excel is similar to as demonstrated in lighting application, [click here](#)

IMPORTANT: Paste conflict occurs when already existing trigger group address and group name are been pasted in trigger application of another network.

The process to **Resolve conflict** is similar to as demonstrated in lighting application, [click here](#)

Edit Trigger Group

Prerequisites: Make sure you have selected *Trigger* application and trigger groups has been created.

1. Double-click on the trigger group name that has to be edited/renamed



Step result: Edit Group Dialog box is displayed.

2. Edit the Trigger Group name and click OK



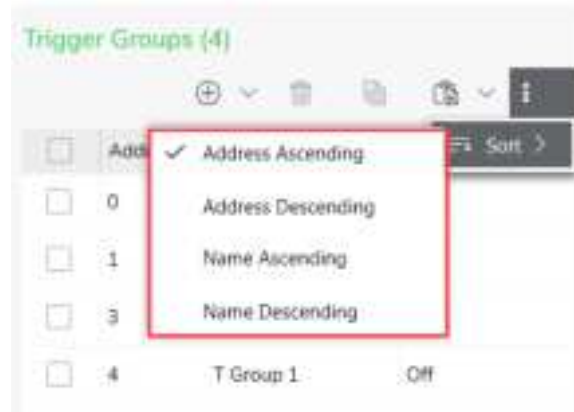
NOTE: Special characters /, ", # and maximum of 32 characters in the trigger group name are valid.

Step result: The Trigger group name is updated.

Sort Trigger Groups

Prerequisites: The *Trigger Group Addresses* must already been created in *Trigger* application.

The existing Groups in application can be sorted using  in the trigger group section of Trigger application.



Choose appropriate sort method.

Delete Trigger Groups

The Delete function allows the user to delete one or more *Group Addresses* from a *Trigger* application.

Prerequisites: The Trigger Group Address must already be created in the *Trigger* application.

1. Select the trigger groups check box

NOTE: One or more group addresses can be selected.

2. Click  in the *Groups* section

3. Confirm **Yes** in the **Confirmation** dialog box

NOTE: Trying to Delete the Trigger group with existing Action selector, displays a **Confirmation** dialog box to confirm the deletion of existing *Action selectors*.

Action Selectors

Associated with each Trigger Group is an Action Selector which is used to select an action to perform. Setting a Trigger Group to a particular action selector can be used to trigger a scene.

The number of action selectors allowed is 256 (0 to 255).

Operation performed on Action Selectors are:

- Add Action selector, page 142
- Copy Action selector, page 143
- Paste Action selector, page 143
- Edit Action selector, page 144
- Sort Action selector, page 145
- Delete Action selector, page 145

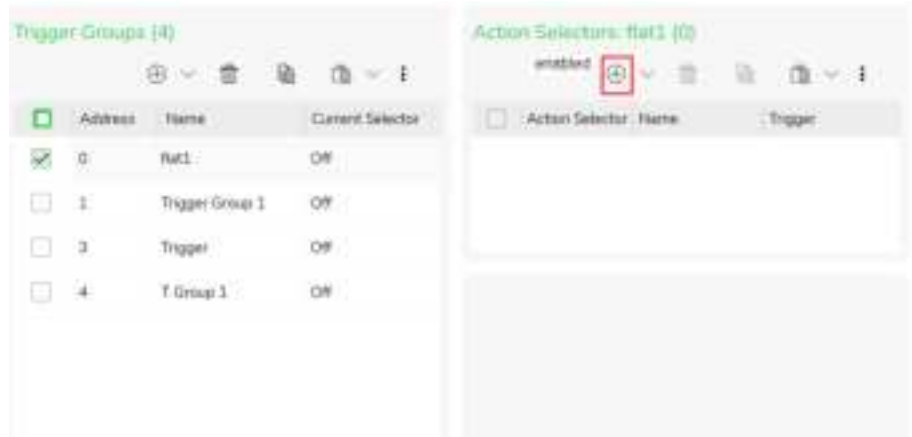
Add Action Selectors

The *Action Selector* is the value of the *Trigger Group* address.

Prerequisites: The Trigger Group must already be added in the application.

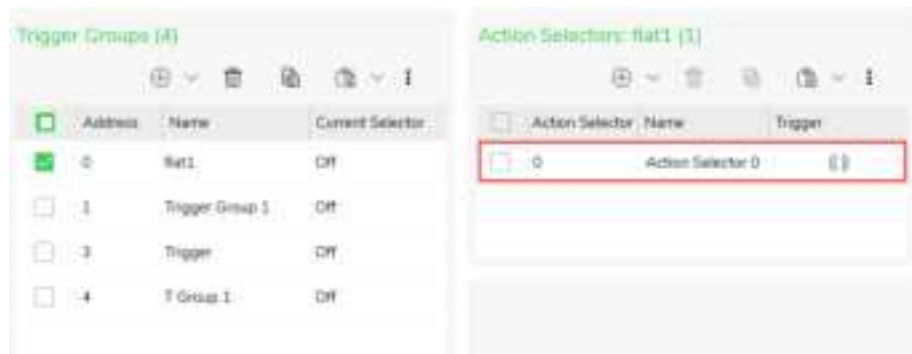
Each Trigger Group Address can create a maximum of 256 (0 to 255).

1. Select a trigger group in the *Trigger Group* section



NOTE: If a group is not selected, the  will be disabled.

2. Click  in *Action Selector* section



Step result: Single Level is added for a selected group.

3. The steps to Add Multiple Action Selectors for a single Trigger group at a time is similar to as demonstrated in lighting application, [Step 3](#)[click here](#), page 134

Copy Action Selectors

The *Action Selectors* created in a group can be copied to another Trigger group in the same Trigger application on same network or from the *Trigger* application from a different network in the project.

Prerequisites: The *Action Selector* must already be copied from a *Trigger Group*.

1. Select the trigger group

Step result: The *Action Selectors* in the selected *Group* are displayed.

2. Select the required action selectors and click  in *Action selector* section.

Step result: The selected action selectors are copied.

Paste Action Selectors

The paste option allows the user to paste the *Action Selectors* copied from one Trigger group into a different Trigger group on the same network or into a *Trigger Group* on another network, or in another project.

Prerequisites: The *Action selectors* must already be copied from a *Trigger Group*.

1. Select a trigger group in *Trigger groups* section.

NOTE: *Action selectors* can either be pasted on same network or into a *Trigger Group* on another network/project.

2. Click  in the *Action selectors* section.



NOTE: The Process to Paste *Action selectors* from Excel is similar to as demonstrated in lighting application, [click here](#)

Step result: The copied *Action selectors* are pasted.

IMPORTANT: Paste conflict occurs when already existing Action selector name and Action selector address are been pasted in Trigger application.

The process to **Resolve conflict** is similar to as demonstrated in lighting application, [click here](#)

Edit Action Selector

Prerequisites: The *Action selectors* must already be existing in the selected Trigger group of *Trigger* application.

1. Double-click on the Action selector I name that has to be edited/renamed



Step result: Edit Trigger Group dialog box is displayed.

2. Edit the *Action selector* name and click OK.



NOTE: Special characters /, ", # and maximum of 32 characters in the Action selector name is valid.



Step result: The *Action selector* name is updated.

Sort Action Selectors

Prerequisites: The *Action selectors* must already be created in a selected *Trigger group* address.

The existing *Action selectors* in application can be sorted using  in the *Action selectors* section of Trigger application.



Choose appropriate sort method.

Delete Action Selectors

The Delete option allows the user to delete one or more *Action Selectors* added to a *Trigger group* address.

Prerequisites: The *Action selectors* must already be created in a selected *Trigger group Address*.

1. Select a trigger group address

NOTE: When trigger group is selected,  will be disabled.

2. Choose the *Action Selector* to be deleted
3. Click  in the *Action Selectors* section

4. Confirm **Yes** in the **Confirmation** dialog box

Step result: The selected *Action selectors* are deleted.

Enable Application

When a network is created in project, the *Enable* application is created by default with an application number 203.

The Enable application is viewed similar to lighting application, [click here](#)

For more details, click:

- [Enable group](#), page 147
- [Values](#), page 150

Enable Group

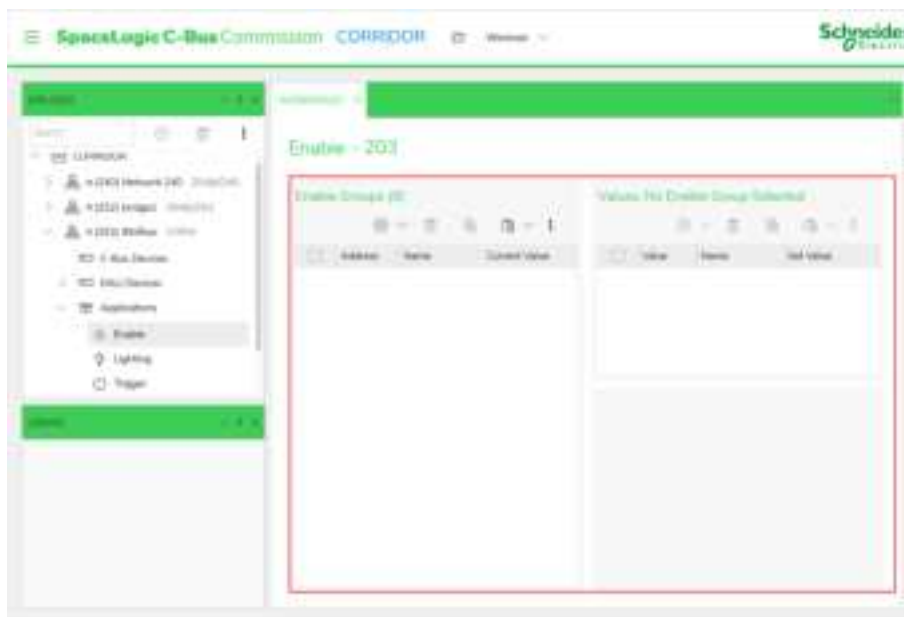
Operations performed on Enable groups are:

- [Add enable group](#), page 147
- [Copy enable group](#), page 148
- [Paste enable group](#), page 148
- [Edit enable group](#), page 148
- [Sort enable group](#), page 149
- [Delete enable group](#), page 150

Add Enable Group

Prerequisites: The Enable application must be selected in the created network.

1. Select a network from the **EXPLORER** window.
2. Click  **Applications** drop-down.
3. Select **Enable**.



Step result: Respective **Enable Groups** and **Values** section of **Enable** is displayed in the **WORKSPACE** window.

4. Click  in the **Enable Groups** section.

5. Choose address.

Step result: A **Enable Group** is created.

The process to create multiple enable groups at a time is similar to as demonstrated in **Lighting Application** , [click here](#).

Copy Enable Groups

In a multi-network project the *Group Addresses* of an *Enable* application on a network can communicate with *Group addresses* of a *Enable* application on another network via C-Bus bridge.

Prerequisites: The Enable Group Address must be already created in an application.

The *Enable Group Addresses* in the *Enable* application can be aligned/arranged with same addresses as in the other *Enable* application.

1. Click *Enable* application
2. Select the enable groups in the *Enable Groups* section

NOTE:

- A single group can be chosen by selecting the check box of the required group, whereas all groups can be chosen by selecting the check box on the top.
- The copy  option will be disabled, if a group is not selected.

3. Click  in the *Enable Groups* section of Enable application.

NOTE: To copy the complete application, click  in the application section.

Step result: The selected enable groups are copied.

Paste Enable Groups

The *Enable* application *Group Addresses* copied from one network are pasted either into another *Enable* application in same network or in a different network, or in different project.

Prerequisites: The Enable Group Address must be copied from an application to another network or to the same network.

NOTE: The *Enable* application *Group Address* copied from one network must be pasted only into the Enable application on another network.

1. Select the Enable application of the network to be pasted in
2. Click  in the *Enable Group* section

NOTE: The process to Paste the *Enable Groups* from excel is similar to as demonstrated in lighting application, [click here](#)

IMPORTANT: Paste conflict occurs when already existing Enable group address and group name are been pasted.

The process to **Resolve conflict** is similar to as demonstrated in lighting application, [click here](#)

Edit Enable Group

Prerequisites: Make sure you have selected *Enable* application and enable groups has been created.

1. Double-click on the enable group name that has to be edited/renamed



Step result: Edit Enable Group Dialog box is displayed.

2. Edit the Enable Group name and click **OK**



NOTE: Special characters except / , “, # and maximum of 32 characters in the Enable group name are valid.

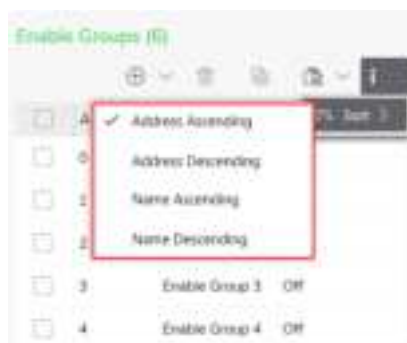


Step result: The Enable group name is updated.

Sort Enable Group

Prerequisites: The *Enable Group Addresses* must already been created in *Enable* application.

The existing Enable Groups in application can be sorted using  in the Enable Group section of Enable application.



Choose appropriate sort method.

Delete Enable Group

The delete group allows the user to delete one or more *Group Addresses* from a *Enable* application.

Prerequisites: The Enable group Address must already be created in the *Enable* application

1. Select the *Enable groups*

NOTE: One or more *Group Addresses* can be selected.

2. Click  in the *Enable Groups* section

3. Confirm **Yes** in the **Confirmation** dialog box.

NOTE: Trying to Delete the *Enable group* with existing *Values*, displays a **Confirmation** dialog box to confirm the deletion of existing *Values*

Values

Each of the *Enable Network Variables* are assigned with values from 0 through 255.

1. Add values, page 150
2. Copy values, page 151
3. Paste values, page 151
4. Edit values, page 151
5. Sort values, page 152
6. Delete values, page 152

Add values

The *Values* is the value of the *Enable* address.

Prerequisites: The *Enable Group* must already be created in the *Enable* application.

Each Enable group Address can create a maximum of 256 (0 to 255).

1. Select a *Enable group* in the enable group section



NOTE: If a group is not selected, the  will be disabled.

2. Click  and choose address in *values* section



Step result: Single Value is added for a selected Enable group.

3. The steps to Add Multiple values for a single Enable group at a time is similar to as demonstrated in lighting application, [Step 3](#) [click here](#), page 134

Copy Values

The *Values* created in a *Enable Group* can be copied from another Enable Network Variable in the same *Enable* application on same network or from the *Enable* application from a different network in the project.

Prerequisites: The *Values* must already be copied from a *Enable Group*.

1. Select the *Enable Group*

Step result: The *Values* in the selected *Enable Group* are displayed.

2. Select the required *Values* and click  of *Values* section.

Step result: The selected values are copied.

Paste Values

The paste option allows the user to paste the *Values* copied from one *Enable Group* into different *Enable Group* on the same network or into a *Enable Group* on another network.

Prerequisites: The *Values* must already be copied from a *Enable Group*.

1. Select a Enable Group in *Enable Group* section

NOTE: *Values* can either be pasted on same network or into a *Enable Group* on another network/project.

2. Click  in the *Values* section.

NOTE: The Process to Paste *Values* from Excel is similar to as demonstrated in lighting application, [click here](#)

Step result: The copied *Values* are pasted.

IMPORTANT: Paste conflict occurs when already existing Values name and Values address are been pasted in *Enable* application.

The process to **Resolve conflict** is similar to as demonstrated in lighting application, [click here](#)

Edit Values

Prerequisites: The *Values* must already be existing in the selected Enable group of *Enable* application.

1. Double-click on the value name that has to be edited.



Step result: Edit Value dialog box is displayed.

2. Edit the *Value* name and click OK.



NOTE: Special characters except /, ", # and maximum of 32 characters in the Values name are valid.

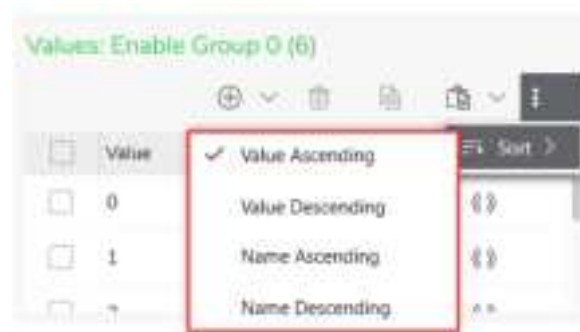


Step result: The *Value* name is updated.

Sort values

Prerequisites: The *Values* must already be created in a selected *Enable Group* address.

The existing *Values* in application can be sorted using  in the *Values* section of *Enable* application.



Choose appropriate sort method.

Delete Values

The delete function allows to delete one or more values added to a *Enable Group*.

Prerequisites: The *Values* must already be created in a selected *Enable group Address*.

1. Select a *Enable Group Address*
2. Select the *Values* to be deleted
3. Click  in the *Values* section
4. Confirm **Yes** in the **Confirmation** dialog box.

Step result: The selected *Values* are deleted.

Error Application

Prerequisites: The network must have already been created in the project .

SpaceLogic C-Bus units monitor and detect error conditions, and report those conditions using the C-Bus error application. The C-Bus error application is used to report error information detected or generated by C-Bus units over the C-Bus network.

Error reports are screened on the error application. The data transmitted across this application can be used by SpaceLogic C-Bus units which accept error messages.

The reports contain information on the source, severity and nature of the error or fault condition. Events may be reported as OK if the monitored event is operating normally.

Devices that receive error messages take appropriate action in response to the information. This may include publishing information for a user, logging errors or sounding alarms.

Error application is created using a reserved application number 206.

SpaceLogic C-Bus units which support error application are:

- DALI/DSI
- Digital Dimmer
- TE Dimmer
- LE Dimmer
- Universal Dimmer
- Modular Dimmer
- Relay
- Key Unit
- Telecommand and Remote Entry
- Temperature Sensor
- PSU
- BMS Reporting
- PWM/LED Dimmer
- Sinewave Dimmer
- Device Controller
- A/C System

The procedure to create an error application is as demonstrated below:



TIP: Alternate method to create error application is shown below:



Operations performed in Error application:

- Add Error object, page 156
- Sort Error object, page 160
- Delete Error object, page 160

An error message consists of the following additional fields:

- **The error severity**

The severity of an error reflects how critical the error is. The error severity categorized in the order of severity are:

1. **Unknown:** The current error severity is unknown (no messages have been received)
2. **All OK:** An Error Severity of All OK is a shortcut used to indicate that all monitored events watched by an error monitoring C-Bus unit are OK.
3. **OK:** An Error Severity of OK is used to indicate that the status of an individual monitored event being watched by an error monitoring C-Bus unit is currently within normal operating conditions
4. **Minor Failure:** An error severity of Minor Failure is used to indicate a warning or low priority error for an individual monitored event being watched by an error monitoring C-Bus unit
5. **General Failure:** An error severity of General Failure is used to indicate an error for an individual monitored event being watched by an error monitoring C-Bus unit
6. **Extreme Failure:** An error severity of Extreme Failure is used to indicate errors (such as 240 V presence on a DALI Line reporting a Line error, Over Current Protection shutting down a channel on C-Bus Dimmer, C-Bus Product failure etc.) for an individual monitored event being watched by an error monitoring C-Bus unit

- **Whether the error is latched**

Error messages can be current or latched. Current error messages reflect the current status of the error condition. Latched error messages reflect the most severe error which has existed since the condition was last cleared. A latched error can be cleared upon receipt of a C-Bus network command from a C-Bus error receiving unit or software.

- **Whether the error has been acknowledged**

An error can be acknowledged by an error receiving unit. The acknowledgement is transmitted onto the C-Bus for use by the appropriate C-Bus event monitoring unit, such as the DALI gateway.

- **Additional error data**

The data accompanying an error status message depends on the C-Bus unit type. Example, when lighting ballasts fail, the event monitoring unit such as the C-Bus Universal dimmer sends details of the dimmer channel where the error event occurred and the nature of the error.

Monitored event

A monitored event is an event or value that is watched to determine the presence or absence of failure. Example, a DALI gateway can be configured to watch for ballast failure on single or set of DALI lighting units on a DALI network.

Event monitoring units

Event monitoring C-Bus units are units which watch monitored events and transmit the error status onto the C-Bus network. The DALI gateway and the C-Bus Universal dimmer are event monitoring units.

An event monitoring unit can:

- Monitor the error status of multiple internal or external events
- Transmit error messages whenever a monitored event changes status
- Refresh error status of monitored events at regular intervals across C-Bus
- When requested, provide a complete error status update of all monitored events
- Store (latch) and transmit the most severe previous error states of a monitored event in order to catch transient errors
- Accept C-Bus command messages to acknowledge errors
- Accept C-Bus command messages to clear latched errors

Error status units or software

An error status unit or software utility accepts error messages from a C-Bus network, but does not watch events directly. Example, the Schedule Plus software receives error messages and is capable of carrying out other operations such as clearing latched errors.

Add Error Object

Prerequisites: The Error application must already be created in a network.

1. Click *Applications* drop-down in the **Explorer** window
2. Click *Error*

3. Click 



NOTE:

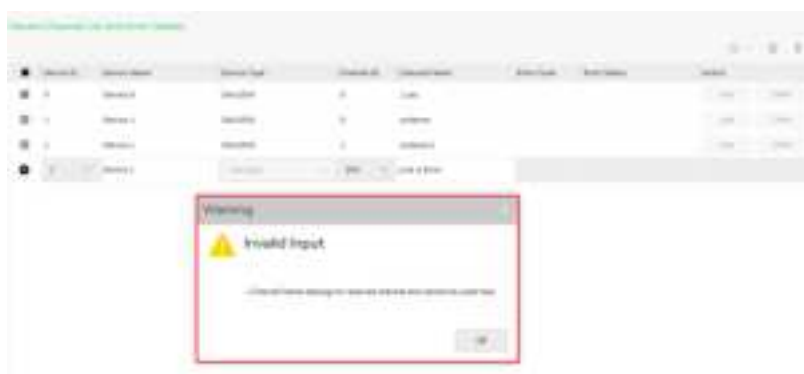
- The error object can be deleted during creation/adding itself using “x” as shown below:



- The Channel and Device name of the error object can be modified. Double-click on the channel/device name, edit the device name to match your device and channel name to match the channel that is been monitored on the device, then click enter (or on the empty space of the section) to update the change
- Warning** dialog box is displayed while attempting to use an reserved channel name



- Invalid Input** message is displayed when attempting to use the channel name which is already belonging to a reserved channel



The field informations of error application is as explained below:

Field	Meaning
Device ID	Unique Device ID is a reference to identify a specific C-Bus unit for error reporting purposes. The error <i>Device ID</i> drop down list allows the ability to select a value from 0- 254
Device Name	Specifies the name of the device
Device Type	Specifies the type of the device
Channel ID	Object Id assigned to the device IMPORTANT: Reserved channel Id's have default channel names: - Channel Id 254: "Unit Error" - Channel Id 253: "Line B Error" - Channel Id 252: "Line A Error" - Channel Id 251: "Channel Aggregate Error"
Channel Name	Specifies the name of the channel NOTE: The channel names of reserved channel Id's cannot be modified.
Error Code	Generated error code

Error Status	Description of the error status
Action	Action to be performed based on error: ACK: Acknowledge the error object Clear: Clears the error object

Different Devices have an Channel ID references as explained below:

DALI 2 Gateway	0-63 DALI line A Object ID's 63-127 DALI line B Object ID's
Dimmers	8 Channel - 0-7 4 Channel - 0-3 NOTE: Each channel Id represents the respective Channel

NOTE:

- While adding new device, the device type can be selected using drop-down option
- Click **Ack**, to acknowledge the particular error



- Click **Clear**, to clear the error code and status

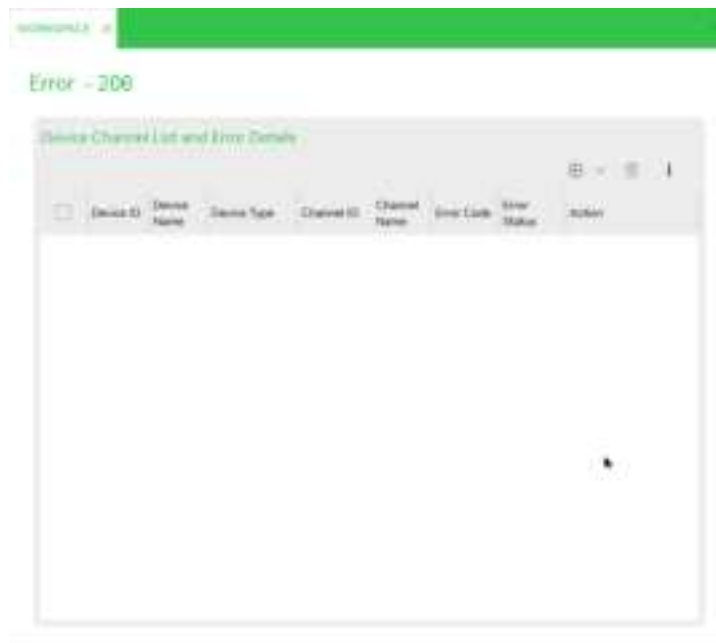


Step result: A Error object is added.

IMPORTANT: Error code and error message for each device are read from the live network devices and will be displayed on error table against corresponding device and channel ID.



TIP: A single Device ID can have multiple Channel ID. The procedure to add multiple error object for the same Device ID is as demonstrated below (maximum of 255 devices can be added at one go):



Sort Error Objects

Prerequisites: The *Error* objects must already have been created in *Error* application.

The existing *Error* objects in application can be sorted using  in the *Device Channel list and Error Status* section of *Error* application.



Choose appropriate sort method.

Delete Error Object

Prerequisites: Error application must already have been created in network and error object must have been added.

1. Select *Error object*
2. Click  in the *Error* section
3. Confirm **Yes** in the **Confirmation** dialog box

NOTE: On selecting **No**, the delete operation will not be performed.

TIP: Alternate method to delete selected error objects is, right-click on the selected **Device > Delete**

Measurement Application

Prerequisites: The network must have already been created in the project .

The Measurement application receives raw data in the form of voltage, current and resistance. This information is converted, scaled and then transmitted across the C-Bus to accurately represent physical measurement units such as temperature, liquid level, light level, etc. The measurement data transmitted across the C-Bus is utilized by C-Bus unit such as temperature, liquid level, light level, etc., which can process measurement application messages.

Measurement application is created using a reserved application address 228.

SpaceLogic C-Bus units which support measurement application.

- General input unit
- current measurement unit
- 5104DTSI temperature sensor
- Color C-Touch Screen
- PAC module
- Schedule Plus +
- HomeGate
- eDLT key input unit
- DALI Gateway
- 8 Channel Switchable Power Supply Dimmer
- 4 Channel Switchable Power Supply Dimmer
- DALI-2 Gateway

The procedure to create an measurement application is similar to creating error application with a reserved address 228.

The field informations of measurement application is as explained below:

Field	Meaning
Device ID	Unique Device ID is a reference to identify a specific C-Bus unit for measurement report. The measurement <i>Device ID</i> drop down list allows the ability to select a value from 0- 254.
Device Name	The Device name specifies the name of the device. The drop-down list allows the selection of a unique ID between 1 - 254.
Channel ID	The Channel ID is used to specify the channel of the device from which the Measurement application data is received. The channel ID drop-down list allows the ability to select a value from 0- 255. NOTE: Channel ID starts at the next available address based on the device ID.
Channel name	The Channel name specifies the name of the channel.
Timeout Period	Time out value that is used by the Controller to monitor the object (0–2880 minutes). • If no timeout value is added, it is considered as invalid with blank. • If the timeout is 0, then the value are read and updated normally.
Unit Type	The Unit type displays the unit type of the value read. The below table explains the standard units that are used in measurement application.
Current Value	The Current value displays the current read value.

Standard Measurement Units

The table below contains a list of measurement units which are available to select when converting input data into measurement data for transmission across the C-Bus system.

Unit Code	Units	Typical Use
\$00	°C	Temperature
\$01	Amps	Current
\$02	Angle (degrees)	Angular displacement
\$03	Coulomb	(Electric charge)
\$04	False=0	
True otherwise	Boolean stuff	
\$05	Farads	Capacitance
\$06	Henrys	Inductance
\$07	Hertz	Frequency
\$08	Joules	Energy
\$09	Katal	Rate of catalytic activity
\$0A	Kg/m3	Density
\$0B	Kilograms	Mass
\$0C	Liters	Volume
\$0D	Liters per hour	Very slow flow rate
\$0E	Liters per minute	Slow flow rate
\$0F	Liters per second	Flow rate
\$10	Lux	Light Level
\$11	Metres	Distance
\$12	Metres per minute	Slow speed
\$13	Metres per second	Speed
\$14	Metres/s2	Acceleration
\$15	Mole	Quantity of substance
\$16	Newton metre	Torque
\$17	Newtons	Force
\$18	Ohms	Resistance
\$19	Pascal	Pressure

Operations performed in Measurement application

- ADD Measurement data, page 162
- Sort Measurement data, page 164
- Delete Measurement data, page 164

Add Measurement Data

Prerequisites: The Measurement application must already be created in a network.

1. Click **Applications** drop-down in the **EXPLORER** window.
2. Click **Measurement**

3. Click 



Step result: A Measurement detail is added.

NOTE:

- A Measurement detail can be deleted during creation/adding itself using “x” as shown below:



4. The Channel and Device name of the measurement data can be modified. Double-click on the channel/device name, edit the device name to match your device and channel name to match the channel that is being monitored on the device, then click enter (or on the empty space of the section) to update the change.

NOTE: Device ID and Device name combination is unique. A Device ID can only belong to the same device name. Modifying the Device Name for One Device ID will update for all the Channels with same Device ID. A Device ID is unique on the network. But there can be multiple device channels on the same device.

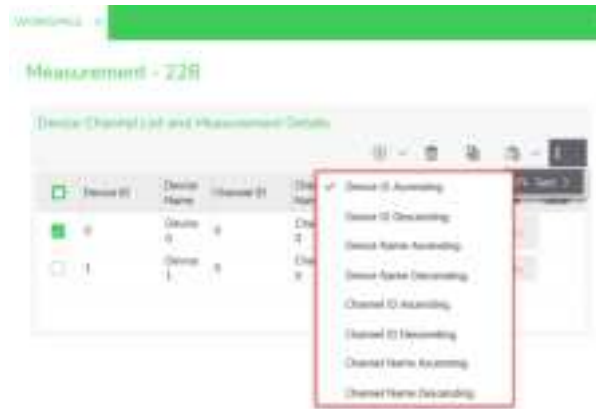
TIP: A single Device ID can have multiple Channel ID. The procedure to add multiple measurement data for the same Device ID is as demonstrated below:



Sort Measurement Data

Prerequisites: The *Measurement* details must already have been created in *Measurement* application.

The existing *Measurement* details in application can be sorted using  in the *Device Channel list and Measurement details* section of *Measurement* application.



Choose appropriate sort method.

Delete Measurement Data

Prerequisites: *Measurement* application must already have been created in network and *measurement details* must have been added.

1. Select *Measurement detail*
2. Click  in the *Measurement details* section
3. Confirm **Yes** in the **Confirmation** dialog box

NOTE: On selecting **No**, the delete operation will not be performed.

TIP: Alternate method to delete selected *measurement details* is, right-click on **selected device** > **Delete**

Emergency Exit Light Application

Prerequisites: The network must have already been created in the project .

Emergency Exit Light application is created using a reserved application address 238.

SpaceLogic C-Bus units which supports Emergency Exit Light application are:

- DALI ECG DT 1 (Generic): Emergency or Exit Light (Generic)
- DALI ECG DT1 A: Emergency or Exit Light (Switched Maintained Dimmable)
- DALI ECG DT1 B: Emergency or Exit Light (Switched Maintained Non-Dimmable)
- DALI ECG DT1 C: Emergency or Exit Light (Maintained)
- DALI ECG DT1 D: Emergency or Exit Light (Non-Maintained)

The procedure to create an emergency exit light application is similar to other applications with a reserved address 238.

For more details:

- Test Groups, page 165
- Devices, page 168

Test Groups

The field information of the test group section are as explained below:

Fields	Meaning
Address	Displays the address of test group created
Name	Displays the name of the group
Duration Test Timeout	Displays the set duration time.

Operations performed on test group section are:

- Add Test Group, page 165
- Copy Test Group, page 166
- Paste Test Group, page 167
- Edit Test Group, page 167
- Sort Test Group, page 168
- Delete Test Group, page 168

Add Test Groups

Prerequisites: The Emergency Exit Light application must be selected in a created network.

1. Click *Applications* drop-down in the **Explorer** window
2. Click *Emergency Exit Light*

- Click  on test group section



Step result: A test group object is added.

NOTE:

- The test group object can be deleted during creation/adding itself using “x” as shown below:



- The Channel and Device name of the test group object can be modified. Double-click on the channel/device name, edit the device name to match your device and channel name to match the channel that is been monitored on the device, then click enter (or on the empty space of the section) to update the change.
- The process to create multiple test group objects at a time is similar to as demonstrated in lighting application, see [Add multiple test group](#)

Step result: Multiple test groups are created.

Copy Test Groups

Prerequisites: The Test Group Addresses must be already created in an application.

The *Test Group Addresses* in the *Emergency Exit Light* application can be aligned/arranged with same addresses as in the other *Emergency Exit Light* application.

- Click *Emergency Exit Light* application
- Select the test groups in the *Test Groups* section

NOTE:

- A single test group can be chosen by selecting the check box of the required group, whereas all test groups can be chosen by selecting the check box on the top
- The copy  option will be disabled, if a group is not selected

- Click  in the *Test Groups* section of *Emergency Exit Light* application

NOTE: To copy the complete application, click  in the application section.

Step result: The selected *Test Groups* are copied.

Paste Test Groups

The *Emergency Exit Light* application *Test Group Addresses* copied from one network are pasted either into another *Emergency Exit Light* application of a different network.

Prerequisites: The Test Group Address must be already copied from an application.

NOTE: The *Emergency Exit Light* application *Test Group Address* copied from one network must be pasted only into the *Emergency Exit Light* application on another network.

1. Select the *Emergency Exit Light* application of the network to be pasted in
2. Click  in the *Test Group* section

NOTE: The process to Paste the *Test Groups* from excel is similar to as demonstrated in lighting application, [click here](#)

IMPORTANT: Paste conflict occurs when already existing test group address and test group name are been pasted in emergency exit application of another network.

The process to **Resolve conflict** is similar to as demonstrated in lighting application, [click here](#)

Edit Test Groups

Prerequisites: Make sure you have selected *Emergency Exit Light* application and test groups has been created.

1. Double-click on the trigger group name that has to be edited/renamed



Step result: Edit Test Group Dialog box is displayed.

2. Edit the Test Group name and click **OK**



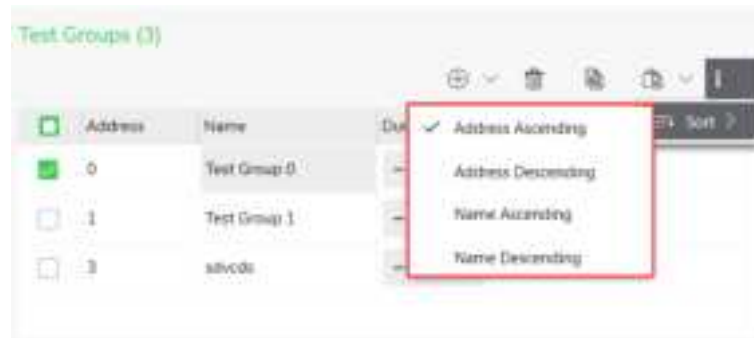
NOTE: Special characters /, ", # and maximum of 32 characters in the test group name are valid.

Step result: The Test group name is updated.

Sort Test Groups

Prerequisites: The *Test Group Addresses* must already been created in *Emergency Exit Light* application.

The existing Test Groups in application can be sorted using  in the test group section of Emergency Exit Light application.



Choose appropriate sort method.

Delete Test Groups

The Delete function allows the user to delete one or more *Test Group Addresses* from a *Emergency Exit Light* application.

Prerequisites: The Test Group Address must already be created in the *Emergency Exit Light* application.

1. Select the *Emergency Exit Light* check box

NOTE: One or more *Test Group Addresses* can be selected.

2. Click  in the test groups section

3. Confirm **Yes** in the **Confirmation** dialog box

NOTE: Trying to Delete the test group with existing devices associated to test group, displays a **Confirmation** dialog box to confirm the deletion of existing *Test Group*.

Devices

Devices section allows to assign devices for particular test group created.

The field information of the device section are as explained below:

Fields	Meaning
CDG Address	Displays the C-Bus DALI-2 Gateway Address
CDG Name	Displays the C-Bus DALI-2 Gateway name
Line A/B	Displays the selected line for device
Line Name	Displays the line name
Object ID	Displays the Object ID of the device
EEL Name	Displays Emergency Exit Light name
Light Source Life	Displays how long the device is been running for (in days)
Test Group	Displays the assigned test group

NOTE:

- The devices created must match the *Emergency and Exit* device details on the target DALI-2 Gateway on the network
- All assigned devices to the deleted test group will be unassigned

Operations performed on Devices section are:

- Add test devices, page 169
- Edit test devices, page 170
- Sort test devices, page 171
- Delete test devices, page 171

Add Test Devices

The *Devices* section allows to add test devices which further is assigned to particular test groups created.

1. In *Devices* section, click 



2. A pop-up is displayed

- Select the CDG address (0–254)
- Define the CDG name, or use the default name
- Select the DALI line (A/B)
- Define the Line name, or use the default name
- Type the number of multiple object ID's to be added (maximum 64 can be added at a time)
- Select the start of Object ID
- Define the EEL name, or use the default name
- Select the Light Source Life value (400 - 7300) in days

NOTE: Value can be modified once the device is added.

- Assign the test group for the device

NOTE: By default, it will be unassigned and can be modified once the device is added.

Click **Add Devices**

Edit Test Devices

Prerequisites: The test devices must already be existing in the *Emergency Exit Light* application.

1. Double-click on either CDG name, Line name, or EEL name that has to be edited.

CDG Address	CDG Name	Line A/B	Line Name	Object ID	EEL Name	Light Source Life	Test Group
1	DALI-2 Gateway 1	A	Line A	0	DALI_EC0_DT1_0	1825	Unassigned
0	DALI-2 Gateway 0	A	Line A	20	DALI_EC0_DT1_20	1825	Unassigned
0	DALI-2 Gateway 0	A	Line A	0	DALI_EC0_DT1_0	1825	Unassigned

Step result: Edit Value dialog box is displayed.

2. Edit the new name and click **OK**

NOTE: Special characters except /, ", # and maximum of 32 characters in the Values name are valid.

Step result: The device name is updated.

Sort Test Devices

Prerequisites: The *Test Devices* must already be added in *Devices* section.

The existing *Devices* in application can be sorted using  in the *Devices* section of *Emergency Exit Light* application.



Choose appropriate sort method.

Delete Test Devices

The Delete function allows to delete one or more devices added to a *Devices* section.

Prerequisites: The *Devices* must already be created in a selected *Devices* section.

1. Select the devices in *Devices* section
2. Click  in the *Devices* section.
3. Confirm **Yes** in the **Confirmation** dialog box.

Step result: The selected *Devices* are deleted.

The Audio application is responsible for the control of audio levels such as volume, bass, and treble as well as for the selection of audio sources for Audio Zones as defined within the Audio application.

Audio Zones and control options for the Audio application can be configured in C-Bus devices such as:

- The procedure to create a audio application is as demonstrated below:



Operations performed in Audio application

- Add zones, page 173
- Sort zones, page 176
- Delete zones, page 176

Add Zones

Audio application allows to create a maximum number 24 zones.

1. Click *Applications* drop-down in the **Explorer** window.
2. Click *Audio*.

3. Click 



Step result: A individual Zone is added.

The audio zone table:

- displays the total number of zones created.
- can have maximum of 24 zones can be added (0–23).
- by default, the zone name is 'Zone X' ('X' is the number of the zone).
- cannot add multiple zones at a time.

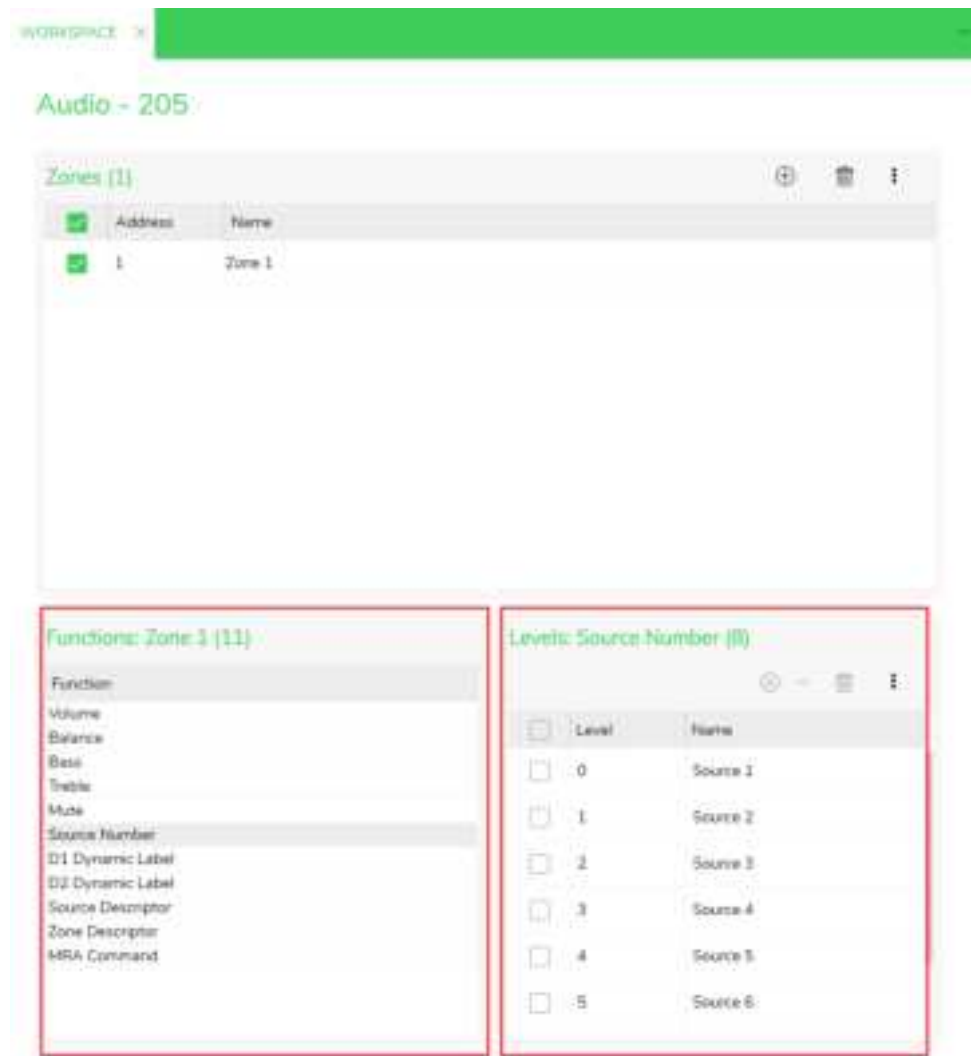
IMPORTANT:

- A zone can be deleted during creation/adding itself using “x” as shown below:



4. The zone name can be modified. Double-click on the zone name, edit the zone name and click enter (or on the empty space of the section) to update the change.

Along with the zone section, the audio application workspace consists of functions of each selected zone and the respective levels of the zone function.



The levels for the zone functions are as below

NOTE: The levels for function are applicable only for below functions.

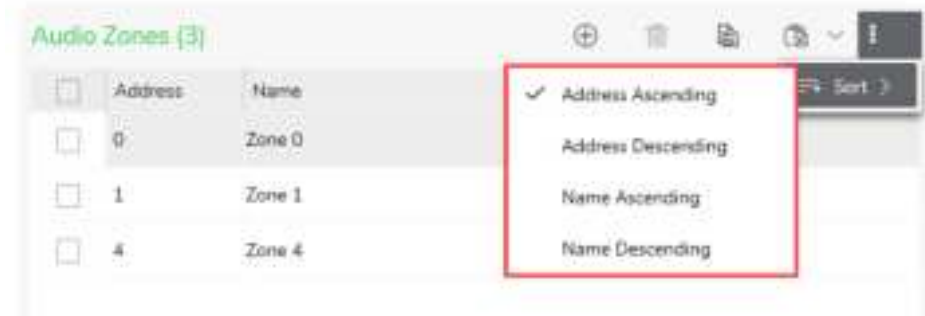
Zones	Level	Name
Balance	128	Mid Point
Bass		
Treble		
Mute	2	Amp on, Vol normal, speakers off
	5	Amp on, Vol preset, speakers off
	7	Amp on, Vol preset, speakers on
	255	Amp on, Vol normal, speakers on
Source Number	0	Source 1
	1	Source 2
	2	Source 3
	3	Source 4
	4	Source 5
	5	Source 6
	6	Source 7
	7	Source 8

Sort Audio Zones

Prerequisites: The *Audio Zones* must already have been created in *Audio* application.

The existing *Audio Zones* in application can be sorted using  in the *Audio Zones* section of *Audio* application.

Audio - 205



Choose appropriate sort method.

Delete Audio Zone

Prerequisites: Audio application are already created in network and Audio zones are added.

1. Select *Audio zone*.
2. Click  in the *Audio Zones* section
3. Confirm **Yes** in the **Confirmation** dialog box.

NOTE: On selecting **No**, the delete operation will not be performed.

TIP: Alternate method to delete selected measurement details is, right-click on **selected device > Delete**

Media Transport Application

The Media Transport Control application is designed to transmit control signals for audio and video equipment used with C-Bus units.

Media Transport application is created using an reserved application number 192.

SpaceLogic C-Bus units which support audio application are:

- CD and DVD recorders and players
- Audio tuners
- Personal video recorders (PVRs)
- Media centres
- MP3 streamers

These C-Bus units has a C-Bus interface to be controlled by Media Transport commands or have a converter which translates Media Transport commands into a form which is understood by C-Bus units.

The software packages that supports to handle Media Transport is C-Bus Ripple® audio streaming software.

The procedure to create a media application is as demonstrated below:



NOTE: To resolve the paste conflict of an application click [here](#)

Operations performed in Media application

- Add media link group, page 177
- Sort media link group, page 180
- Delete media link group, page 180

Add Media Link Groups

Prerequisites: The Media Transport application must already be created in a network.

Media Transport application allows to create a maximum number of 255 media link groups.

1. Click *Applications* drop-down in the **Explorer** window.
2. Click *Media Transport*.

3. Click 

Step result: A individual media link group is added.

The media link group table:

- displays the total number of media link groups created.
- can have maximum of 255 media link groups.
- by default, the media link group name is 'Media Link Group X' ('X' is the number of the media link group).
- cannot add multiple media link groups at a time.

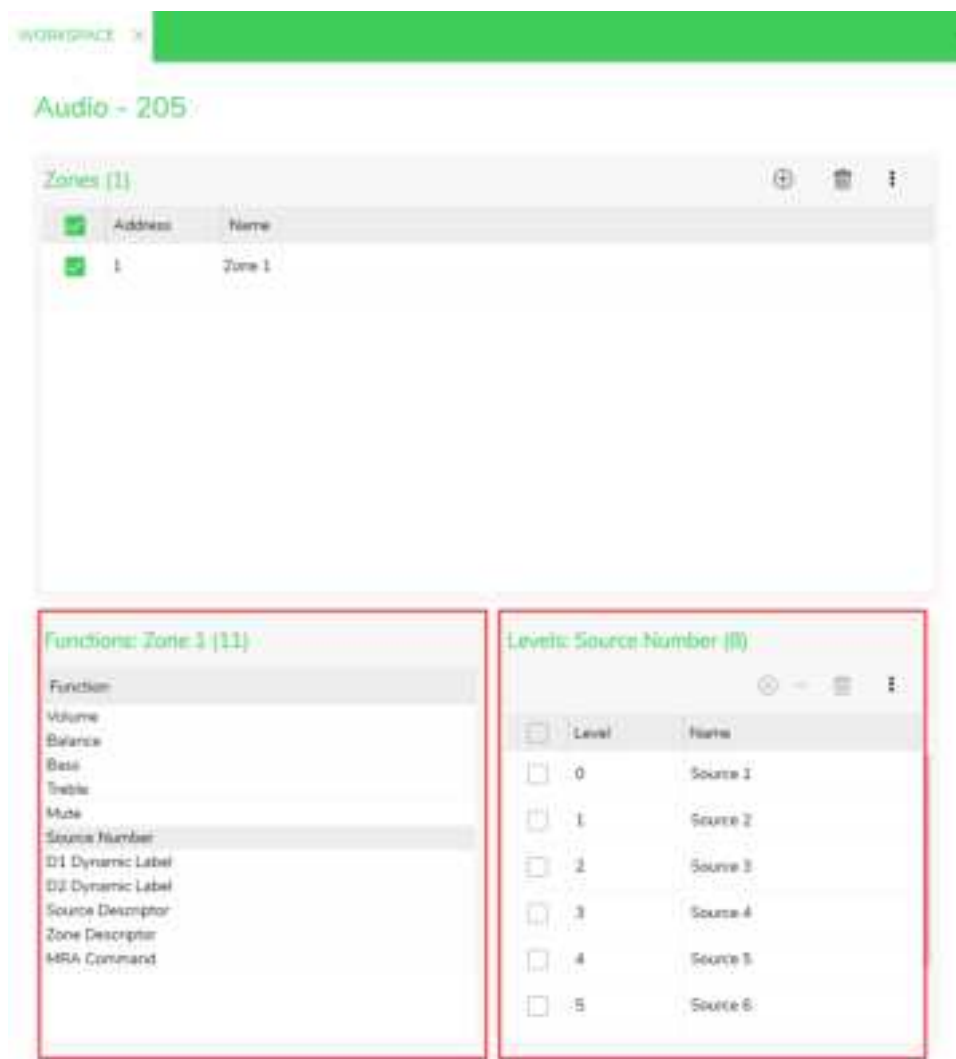
IMPORTANT:

- A media link group can be deleted during creation/adding itself using "x" as shown below:



4. The media link group name can be modified. Double-click on the media link group name, edit the media link group name and click enter (or on the empty space of the section) to update the change.

Along with the media link group section, the media transport application workspace consists of functions of each selected media link group and the respective levels of the media link group function.



The levels for the media link group functions are as below

NOTE: The levels for function are applicable only for below media link group functions.

Functions	Level	Name
Play/Stop	0	Stop
	1	Play
Pause/Resume	0	Pause
	255	Resume
Shuffle	0	Shuffle off
	255	Shuffle on
Repeat	0	Repeat off
	1	Repeat current
	255	Repeat all
Forward and Rewind	0	Normal speed
	2	2x speed
	4	4x speed
	6	8x speed
	8	16x speed
	10	32x speed
	12	64x speed

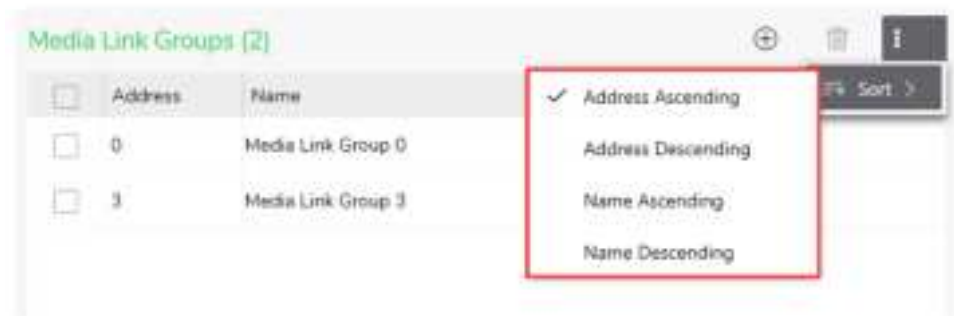
Source Power Control	0	Source power off
	255	Source power on

Sort Media Link Groups

Prerequisites: The *Media link groups* must already have been created in *Media Transport* application.

The existing media link groups in application can be sorted using  in the *Media link groups* section of Media transport application.

Media Transport - 192



Choose appropriate sort method.

Delete Media Link Groups

Prerequisites: Media Transport application are already created in network and media link groups are added.

1. Select *Media Link Group*.
2. Click  in the *Media link group* section
3. Confirm **Yes** in the **Confirmation** dialog box.

NOTE: On selecting **No**, the delete operation will not be performed.

TIP: Alternate method to delete selected media link group is, right-click on **selected device > Delete**

Input Unit

The input units allow users to interact with the system or get input from the environment by means of sensing devices.

- Wall switches have input keys which allow users to utilize short press/release and long press/release actions to affect lighting control.
- Sensors, on the other hand, are units which convert data from sensing devices into C-Bus messages.
- General input units receive analog or digital measurements from channels and convert the signals into event and broadcast measurement messages via the C-Bus.

Input units can be used to:

- Control lighting conditions by manual switching or as a response to changes in lighting levels.
- Control air conditioning according to ambient temperature.
- Control security and access systems by responding to human presence or predetermined codes.
- Convert measurement data into C-Bus event messaging.

C-Bus input units respond to certain stimuli - human touch, ambient light conditions, temperature and infrared radiation - and then send messages to appropriate output units in a predetermined way.

The devices under Input unit category are as listed below:

- Wall Plates/Key Input Unit, page 181

Wall Plates/Key Input Unit

SpaceLogic C-Bus provides a range of Key Input units.

- Saturn
- Saturn Zen

To upgrade Wall Plates/Key Input Unit firmware, .

Unit Types

Category		Catalog Number	Unit Type	Description
Saturn	'A' Series	5082680	KEYB2A	2 Gang Saturn Key Input Unit
		5082GF		
		5082J80		
		5082PW		
		5084680	KEYB4A	4 Gang Saturn Key Input Unit
		5084GF		
		5084J80		
		5084PW		
	'E' Series	5086680	KEYB6A	6 Gang Saturn Key Input Unit
		5086GF		
		5086J80		
		5086PW		
		E5082680	KEYB2A	2 Gang Saturn Key Input Unit
		E5082GF		
		E5082PW		

		E5084680	KEYB4A	4 Gang Saturn Key Input Unit
		E5084GF		
		E5084PW		
		E5086680	KEYB6A	6 Gang Saturn Key Input Unit
		E5086GF		
		E5086PW		
Saturn Zen	'A' Series	R5041ZB	KEYH1A	1 Gang Saturn Zen Key Input Unit
		R5041ZW		
		R5042ZB	KEYH2A	2 Gang Saturn Zen Key Input Unit
		R5042ZW		
		R5043ZB	KEYH3A	3 Gang Saturn Zen Key Input Unit
		R5043ZW		
		R5044ZB	KEYH4A	4 Gang Saturn Zen Key Input Unit
		R5044ZW		
	'E' Series	ER5041ZB	KEYH1A	1 Gang Saturn Zen Key Input Unit
		ER5041ZW		
		ER5042ZB	KEYH2A	2 Gang Saturn Zen Key Input Unit
		ER5042ZW		
		ER5043ZB	KEYH3A	3 Gang Saturn Zen Key Input Unit
		ER5043ZW		
		ER5044ZB	KEYH4A	4 Gang Saturn Zen Key Input Unit
		ER5044ZW		

To Upgrade Key Input Unit firmware, [click here](#), page 35.

The field informations to configure SpaceLogic C-Bus Saturn and Saturn Zen series are described as below:

Applications	This section displays the lighting applications supported by the Saturn and Saturn Zen series. Up to four lighting applications can be defined and then used throughout the configuration of the Saturn and Saturn Zen series each.		
Keys Depending on the input unit selected, the number of keys will vary	Profiles Enable Group Allows to create a new enable group. By default, <unused> is selected. Click  to create a new enable group. Click OK once the profiles are edited.	Profiles Enable Group By default, <unused> enable group is selected. Click  to edit the enable group name. Click  to create a new enable group.	
		Profiles Selection Once the enable group is selected, one or all profile can be selected (profile 2, profile 3, profile 4). Profile 1 is selected by default and remains along with other profile selection.	
		Disable All Keys Select the check box to disable all the keys. No key functions will be working if set.	
		Profile Name Profile 1 is selected by default along with the chosen profiles. To edit the profile name, select the profile name and type the new one.	
		Power Recovery By default, profile 1 name will be selected.	
	Profile Allows the keys to change their behavior when triggered. Up to four profiles can be used. Profiles utilize different widgets to define alternate (or same) key behavior for each profile. All the profiles will be available. By default, profile 1 will be selected.		
	Key	Widget	Widget: Can choose widgets ranging from 1–16.

	Each keys can have max of 16 widgets created in it.	Displays the selected widget and application for a particular key. Depending on the application chosen the key property differs.	- Click drop-down next to the widget to select the application. - Click  to add new widget. - Click  to remove the widget.	
		Function	Click here for more details.	
		Group	Select any existing group or create new using  , or edit group name using  . Across all widgets in a group, the group address remains the same.	
		Ramp Rate	Ramp rate can be set from instant to max 17 minutes.	
		Indicator	Indicator Assignment	Any of the 16 widget can be assigned to the indicator.
			Indicator On Color	Indicator color can be set to: - Off 8 different colors 2 User-defined - Dynamic (using C-Bus group to control) NOTE:  is enabled only for user defined and dynamic changes.
			Indicator Off Color	Indicator color can be set to: - Off 8 different colors 2 User-defined 5 Dynamic (using C-Bus group to control) NOTE:  is enabled only for user defined and dynamic changes.

The table below explains the details of widgets selected with its functions.

Lighting	Function	Select one of the below lighting functions:	
	Allows to select different function available for selected application.	- Toggle - On - Off - Preset - Toggle Dimmer - Toggle Dimmer Down - Toggle Dimmer Up - Memory Toggle Dimmer - Memory Toggle Dimmer Down - Memory Toggle Dimmer Up - Dimmer Down	- Dimmer Up - Down - Up - Soft Down - Soft Up - Nudge Down - Nudge Up - Bell Press - Custom 1 - Custom 2 - Custom 3 - Custom 4
		If custom function is selected, files can be imported and exported to software using  and  respectively.	
	Group	Select any existing group or create new using  , or edit group name using  .	

		Across all widgets in a group, the group address remains the same.
	Ramp Rate	Ramp rate can be set from instant to max 17 minutes.
	Restore Level	By default, restore level is set to 0%.
Timer	Function Allows to select different function available for selected application.	Select one of the below timer functions: • Retrigger Timer • Toggle Timer • Delay Timer • Pulse Timer
	Timer Level	Allows to adjust timer level to a max of 100% (255) to min of 1% (1).
	Ramp Rate	Allows to set ramp rate between 4 sec to 17min.
	Duration	Set the duration for the timer.
	Expiry Level	By default, set to 0%. Expiry level value varies from 0 - 100%.
	Expiry Ramp Rate	By default, expiry ramp rate is set to instant . The values vary from 4 seconds to 17 minutes.
	Enable Timer Flash	Select the check box to enable indicator status. By default, it is enabled.
	Restore Level	Assigned restore level is common across widgets with the same group which varies from 0 to 100%.
Shutter Relay	One of the following shutter relay functions can be selected: • Shutter Toggle • Shutter Open/Stop • Shutter Close/Stop • Shutter Open • Shutter Close • Shutter Stop	
Enable	One of the following enable functions can be selected: • Unused (Default) • Toggle • On • Off • Preset ◦ Preset Level: Allows to set the preset level between 0 - 100 %	
	Enable Group	Select any existing group or create new using  , or edit group name using  .
	Restore Level	Assigned restore level is common across widgets with the same group which varies from 0 to 100%.
Fan Cycle	Trigger Group	Select any existing group or create new using  , or edit group name using  .
	Action Selector	Select any existing action selector or create new using  , or edit action selector name using  .
Scene	One of the following scene functions can be selected: • Scene Toggle (Default) • Scene Set • Scene Off • Scene Off/Down • Scene On/Up	
	Scene Label	Select the scenes between 1 - 8. Click  for scene manager, page 194.
	Ramp Rate	Allows to set ramp rate between 4 sec to 17min. This parameter is applicable only for scene functions Scene Off/Down and Scene On/Up.

	Trigger Group	Select any existing group or create new using  , or edit group name using  .	
	Action Selector	Select any existing action selector or create new using  , or edit action selector name using  .	
	Enable Scene Repair	Enable the scene repair by checking the check box. Enabling the scene repair will maintain the scene status if all the items in the scene, match the current live state.	
Sequence	One of the following scene functions can be selected: • Sequence Toggle (Default) • Sequence Start • Sequence Off • Sequence Reverse Toggle • Sequence Reverse Off • Sequence Stop		
	Sequence Label	Select the sequence between 1 - 8. Click  for sequence manager, page 195.	
	Trigger Group	Select any existing group or create new using  , or edit group name using  .	
	Action Selector	Select any existing action selector or create new using  , or edit action selector name using  .	
	Use Delay For Off	Check the check box to enable delay off.	
Audio	Function	Select one of the below audio functions: • Volume Up • Volume Down • Volume Cycle • Treble Up • Treble Down • Treble Cycle • Bass Up • Bass Down • Bass Cycle • Balance Left • Balance Right • Balance Cycle • Next Source • Previous Source • Preset Source • Dynamic 1 • Dynamic 2	
	Parameters	• Zone Zones available in the range of 0 to 23. • Ramp Rate. Ramp rate ranges from Instant, 4 sec to 17 mins.	These parameters are applicable for below functions: • Volume Up • Volume Down • Volume Cycle • Treble Up • Treble Down • Treble Cycle • Bass Up • Bass Down • Bass Cycle • Balance Left • Balance Right • Balance Cycle
		• Zone Zones available in the range of 0 to 23.	These parameters are applicable for below functions: • Next Source • Previous Source • Dynamic 1 • Dynamic 2
		• Zone Zones available in the range of 0 to 23. • Source Zones with available levels ranging from 0 to 7.	These parameters are applicable for below functions: • Preset Source
	Multi-Toggle	Allows to toggle multiple groups in an application.	
Application Each key can have 4 applications		By default, Lighting application is selected.	

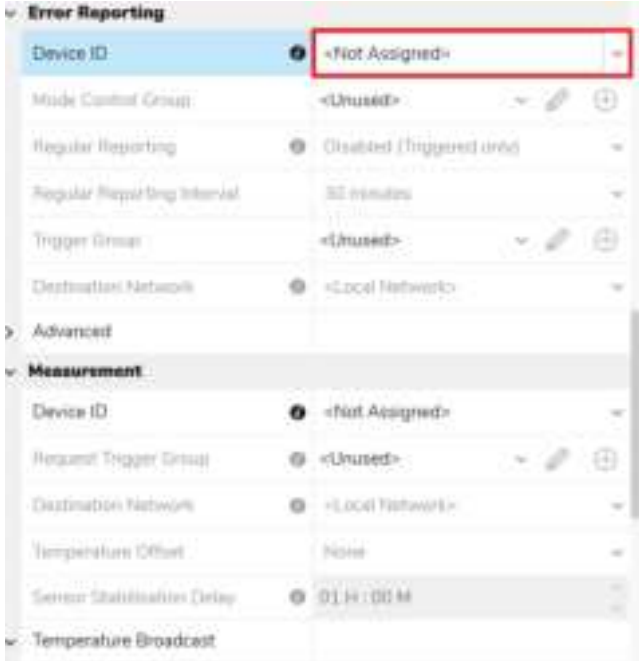
	Groups	Allows to select available groups in selected lighting application.	
	Each key has 8 Groups	Allows to select available groups in selected enable application.	
Linked	Allows add conditional logic behavior to a button press of a key. IMPORTANT: Linked widget will be disabled/hidden in the list when: • a linked widget cannot be selected/defined for the first /main widget of a key. • selecting a widget which is already defined as a Linked widget. • selecting a widget number which is already configured as a linked widget type and is assigned to any other Key. Linked widget will be enabled in the list when: • an additional (second or more) widget added to the key (must add another widget to the key to use linked widget). • any widget number is already configured as a linked widget type and is not assigned in any other key. NOTE: An additional (second or more) widget added to the key, widget already assigned to a key cannot be changed/modified to a linked widget. It can only configure a widget which is not assigned. Once the linked widget is selected in a key, the widget number or widget type cannot be modified. The linked widget must be removed from the key and then added again.		
	Control Widget	• Widgets that are already configured/assigned to the current key are displayed and allowed for selection. • While adding an additional widget to a key, and if the widget number selected is a control widget for an existing linked widget, then the associated linked widget also appears in the (to be added) key. • Removing the first/main widget in a key which is configured as a control widget for a linked widget in the same key displays a confirmation dialogue to confirm the action. On selecting YES, both the control and linked widgets are removed from the key. Confirmation  Delete widget? This widget is configured as a Control widget for a Linked widget for this key. Deleting this widget will also delete the related Linked widget. Are you sure you want to proceed? Yes No Click Yes to save the changes in widget and to delete linked widget. Click No to cancel the operation. • Selecting an existing linked widget for a key, the control widget property updates to reflect the first/main widget for that key. • The linked relationship between the linked widget and the control widget in all the keys and across all the profiles are maintained and displayed when: ◦ A linked widget is added to a key. ◦ A widget is changed/modified to a control widget. NOTE: Once a control widget is selected, the control selection cannot be modified. The linked widget must be removed from the key and then added again.	
	Linked Event	Linked Event options include: • Control Widget Turns On • Control Widget Turns Off • Control Widget Timer Expiry	
	Linked Action	Linked Action options include: • Turn On • Turn Off • Preset • Turn On and Start Timer • Turn Off and Start Timer • Start Timer • Trigger Event • Enable Event	
	Group	Allows to select among existing groups.	
	Level/Expiry Level	Allows to set a level between 1 to 100%.	
	Ramp Rate/Expiry Ramp Rate	Allows to set ramp rate between 4 sec to 17 min, by default its instant.	
	Duration	Allows to set the duration in hh:mm:ss.	

	Disable link in this Profile This property is applicable for all the linked widgets in the current profile. By default it is unchecked. Checking Disable link in this profile will disable the linked widget in the current key. The control widget continues to operate maintaining the linked widget relationship. Property is disabled when profiles are not in use. IMPORTANT: The Disable link in this Profile property can be set only while using more than one profile in the device.
	Indicator Indicator Assignment - The indicator assignment property for the key is displayed only in an enabled state widgets that are not configured as a linked widget for user selection. Linked Widgets are disabled (appear in a disabled state). - If a valid widget is already defined for the Indicator Assignment property, then upon modification of the widget type, for that widget to a linked widget type, the Indicator Assignment property updates and selects automatically the first/main widget for the key. Indicator On Color Allows to set the indicator On color. Indicator Off Color. Allows to set the indicator Off color.

Indicators	Indicator Application	Allows to select among the defined Active Brightness control group and Idle Brightness control group.	
	Active Brightness	The Active Brightness can be equal to or greater than the Standby Brightness. By default set to 100%. If a group is assigned to the Active Brightness Control Group, then the start up level for that group is the value set here.	
	Active Brightness Control Group	To control the active brightness, select the group By default, <unused> is selected. Click  to edit the group and  to create new group.	
	Standby Timeout	The minimum value of 0 sec disables the Standby Timeout for this device.	
	Standby Brightness	The Standby Brightness can be equal to or less than the Active Brightness. By default set to 100%. If a group is assigned to the Standby Brightness Control Group, then the start up level for that group is the value set here.	
	Standby Brightness Control Group	To control the idle brightness, select the group By default, <unused> is selected. Click  to edit the group and  to create new group.	
	Nightlight Options	Profile	Allows the keys to change their behavior when triggered. Up to four profiles can be used. Profiles utilize different widgets to define alternate (or same) key behavior for each profile. All the profiles will be available. By default, profile 1 will be selected.
		Enable Nightlight	Check the check box to enable nightlight.
		Ignore First Key Press	This field is enabled only when Enable Nightlight is checked.

		Nightlight Indicator Color	Nightlight Indicator color can be set to: • Off • 8 different colors • 2 user defined • 5 Dynamic (using C-Bus group to control) NOTE:  is enabled only for user and dynamic changes
		Nightlight Color Control Group Uses a C-Bus group to control the nightlight. • Level 0: Group is off • Above Level 0: Group is on	By default, <unused> is selected. Click  to edit the group and  to create new group.

Corridor Linking	Application	Select the application to be applicable for corridor linking.
	Link Group	A common group address is assigned to all units sharing the same common area. By default, <unused> is selected. Click  to edit the group and click  to create new group.
	Corridor Group	The group address that is used for the common area that is adjacent to the office. By default, <unused> is selected. Click  to edit the group and click  to create new group.
	Office Group	The group address that is used for the Office which is adjacent to the common area. By default, <unused> is selected. Click  to edit the group and click  to create new group.
	Corridor Timer	Allows to set the timer for corridor timeout. By default, 00H: 05Min: 00s.

Error Reporting	Device ID	This field displays the unique Device ID for the device. NOTE: The Device ID is for the entire device and is as same for measurement. When you assign a Device ID, and then if you set the Device ID to Not Assigned, then all properties in both the Error Reporting and Measurement section are reverted to their default settings and disabled (grey out state).  Mouse over on the Device ID info icon to view the tooltip message. 
	Mode Control Group	This field allows to add an enable group (0–254). If you assign a group, Regular Reporting Interval drop-down is enabled.
	Regular Reporting	This field configures the Error Reporting mode of the Dimmers into one of modes: • Disabled (Triggered only) • All Errors, most recent and most severe • All Errors, most recent only • Minimum Errors, most recent only • Minimum Errors, most recent and most severe Mouse over on the Regular Reporting info icon to view the tooltip message.
	Regular Reporting Interval	This drop-down is used to select the time interval period between the completion of a regular report and beginning of the next report in Always On, Most recent only and Always On, Most recent and most severe modes. By default, the interval is 30 minutes Regular reporting interval is enabled for all others except the Trigger Only mode.
	Trigger Group	This field contains a Trigger Group to trigger an error reporting event for any of the three error reporting modes. When a Trigger group is created, resend and acknowledge action selector are displayed.

		The Resend Action Selector is set to send all errors and Acknowledge Action selector is set to acknowledge all errors.	
	Destination Network	This field contains the destination C-Bus network to which the key units routes the error reporting messages. This allows the error messages to be sent to a remote C-Bus network for central monitoring if it's not the local network Mouse over on the Destination Network info icon to view the tooltip message.	
	Advanced	C-Bus Voltage Warning Set Threshold	- By default, Disabled is selected. - The value selected must be less than the C-Bus Voltage Warning Clear Threshold value selected. - If the C-Bus Voltage Warning Clear Threshold is Disabled, then setting a value here will also set the C-Bus Voltage Warning Clear Threshold value to (current C-Bus Voltage Warning Set Threshold value + 1 V). Mouse over on the C-Bus Voltage Warning Set Threshold info icon to view the tooltip message.
		C-Bus Voltage Warning Clear Threshold	- By default, Disabled is selected. - The value selected must be greater than the C-Bus Voltage Warning Set Threshold value selected. - If the C-Bus Voltage Warning Set Threshold is Disabled, then setting a value here will also set the C-Bus Voltage Warning Set Threshold value to (current C-Bus Voltage Warning Clear Threshold value - 1 V). Mouse over on the C-Bus Voltage Warning Clear Threshold info icon to view the tooltip message.
		C-Bus Voltage Critical Set Threshold	- By default, Disabled is selected. - The value selected must be less than the C-Bus Voltage Critical Clear Threshold value selected. - If the C-Bus Voltage Critical Clear Threshold is Disabled, then setting a value here will also set the C-Bus Voltage Critical Clear Threshold value to (current C-Bus Voltage Critical Set Threshold value + 1 V). - If the C-Bus Voltage Warning Set Threshold has a value set (other than Disabled), then the value selected must be less than current C-Bus Voltage Warning Set Threshold value. Mouse over on the C-Bus Voltage Critical Set Threshold info icon to view the tooltip message.

		C-Bus Voltage Critical Clear Threshold - By default, Disabled is selected. - The value selected must be greater than the C-Bus Voltage Critical Set Threshold value selected. - If the C-Bus Voltage Critical Set Threshold is Disabled, then setting a value here will also set the C-Bus Voltage Critical Set Threshold value to current C-Bus Voltage Critical Clear Threshold value - 1 V. Mouse over on the C-Bus Voltage Critical Clear Threshold info icon to view the tooltip message.
		Unit Over Temperature Set Threshold This field is a combo box which is by default set to 70 °C. The Unit Over Temperature Set Threshold property increments by 1 °C with a range of 1 °C - 80 °C. Mouse over on the Unit Over Temperature Set Threshold info icon to view the tooltip message.
		Unit Over Temperature Clear Threshold This field is a combo box which is by default set to 65 °C. The Unit Over Temperature Clear Threshold property increments by 1 °C with a range of 0 °C - 79 °C. Mouse over on the Unit Over Temperature Clear Threshold info icon to view the tooltip message.

Measurement	Device ID	This field displays the unique device ID for the device. NOTE: The Device ID is for the entire device and is as same Error. Mouse over on the Device ID info icon to view the tooltip message.
	Request Trigger Group	Select the trigger group for measurement application. By default, <unused> is selected. Click  to edit the group and  to create new group. Mouse over on the Request Trigger Group info icon to view the tooltip message.
	Destination Network	This field contains the destination C-Bus Network to which the key units routes the error reporting messages. This allows the error messages to be sent to a remote C-Bus Network for central monitoring if it's not the local network. Mouse over on the Destination Network info icon to view the tooltip message.
	Temperature Offset	Allows to set the device to offset between 25 °C to 25 °C.
	Sensor Stabilization Delay	The Sensor Stabilization Delay is applicable to both the onboard temperature and humidity sensors only upon device power up. The device will not send any Measurement data or raise any alarms until the delay time period has elapsed. Sensor Stabilization Delay is set in H:M with 1 hour increment for hours and 1 minute increment for minutes. Maximum delay value that can set is 4:14. Mouse over on the Sensor Stabilization Delay info icon to view the tooltip message.

	Temperature Broadcast	Broadcast Interval Allows to set the interval to broadcast temperature	By default Do Not Broadcast is selected. Broadcast interval can be set between 10 seconds to 40 minutes.
		Broadcast on Change Threshold	By default Disabled is selected. Broadcasts if the unit crosses the set threshold.
	Humidity Broadcast	Broadcast Interval	By default Do Not Broadcast is selected. Broadcast interval can be set between 10 seconds to 60 minutes.
		Broadcast on Change Threshold	By default Disabled is selected. Broadcasts if the unit crosses the set threshold
		Profile	Allows the keys to change their behavior when triggered. Up to four profiles can be used. Profiles utilize different widgets to define alternate (or same) key behavior for each profile. All the profiles will be available. By default, profile 1 will be selected.
		Alarm Application	Select the application for alarm.
	Temperature Alarms	Enable High Temperature Alarm	Select the check box to enable alarm on unit's high temperature.
		Alarm Group	Select the group for alarm. By default, <unused> is selected. Click  to edit the group and  to create new group.
		Enable Group	Select the enable group . By default, <unused> is selected. Click  to edit the group and click  to create new group.
		Enable Group Restore	This field is enabled only when Enable group is been selected. Enable group can be restored in one of the following modes: • All events disabled (Default) • Only On events enabled • Only Off events enabled • All events enabled
		Alarm Set Threshold	Set the alarm set threshold between 46 - 60 °C
		Alarm Clear Threshold	Set the alarm clear threshold between 0 - 49 °C
		Enable Low Temperature Alarm	Select the check box to enable alarm on unit's low temperature .
		Alarm Group	Select the group for alarm By default, <unused> is selected. Click  to edit the

			group and click  to create new group.
		Enable Group	Select the enable group By default, <unused> is selected. Click  to edit the group and click  to create new group.
		Enable Group Restore	This field is enabled only when Enable group is selected. Enable group can be restored in one of the following modes: • All events disabled (Default) • Only On events enabled • Only Off events enabled • All events enabled
		Alarm Set Threshold	Set the alarm set threshold between 0 - 14 °C.
		Alarm Clear Threshold	Set the alarm clear threshold between 11 - 60 °C.
	Humidity Alarms	Enable High Humidity Alarm	Select the check box to enable alarm on unit's high humidity.
		Alarm Group	Select the group for alarm. By default, <unused> is selected. Click  to edit the group and click  to create new group.
		Enable Group	Select the enable group By default, <unused> is selected. Click  to edit the group and click  to create new group.
		Enable Group Restore	This field is enabled only when Enable group is been selected. Enable group can be restored in one of the following modes: • All events disabled (Default) • Only On events enabled • Only Off events enabled • All events enabled
		Alarm Set Threshold	Set the alarm set threshold between 85 - 100 %RH.
		Alarm Clear Threshold	Set the alarm clear threshold between 0 - 85 %RH.
		Enable Low Humidity Alarm	Select the check box to enable alarm on unit's low humidity.
		Alarm Group	Select the group for alarm. By default, <unused> is selected. Click  to edit the group and click  to create new group.
		Enable Group	Select the enable group By default, <unused> is selected. Click  to edit the

			group and click  to create new group.
		Enable Group Restore	This field is enabled only when Enable group is selected. Enable group can be restored in one of the following modes: • All events disabled (Default) • Only On events enabled • Only Off events enabled • All events enabled
		Alarm Set Threshold	Set the alarm set threshold between 0 - 10 %RH.
		Alarm Clear Threshold	Set the alarm clear threshold between 15 - 100 %RH.

Global	Unit Parameters	Status Request Interval	Allows to set minutes and seconds for status request interval.
		Device Idle Time out	Allows to set minutes and seconds for status request interval.
	Device Scenes	Displays the number of scenes used Scene Manager., page 194	
	Device Sequences	Displays the number of sequence used Sequence Manager, page 195.	
	Device Key Assignments	Key Assignment Overview., page 197	
Unit Identification	Unit Type	This field contains the unit type of the device.	
	Catalogue Number	This field contains the catalog number related to the unit type.	
	Firmware Version	This field shows the version number of the C-Bus interface firmware which exists on the physical network or which has been assigned to a logical representation of the unit in the database	
	Part Name	This field contains the part name which is stored in the unit hardware, that can be modified.	
	Unit Address	This field displays the unit address assigned to the device.	
	Serial Number	This field contains the serial number which exists on the physical unit.	
	Tag Name	This field contains the name that user can give to the logical representation of the unit. This name can be up to 32 characters long and is stored in the project database only.	
	Notes	This field contains a location to add notes about the unit which is stored in the project database only.	
Status Status will be displayed only when the unit is live	C-Bus Voltage (V)	Displays the C-Bus Voltage.	
	Unit Humidity (% RH)	Displays unit's humidity.	
	Unit Temperature (°C)	Displays unit's temperature only when the Sensor Stabilization Delay time period is elapsed.	

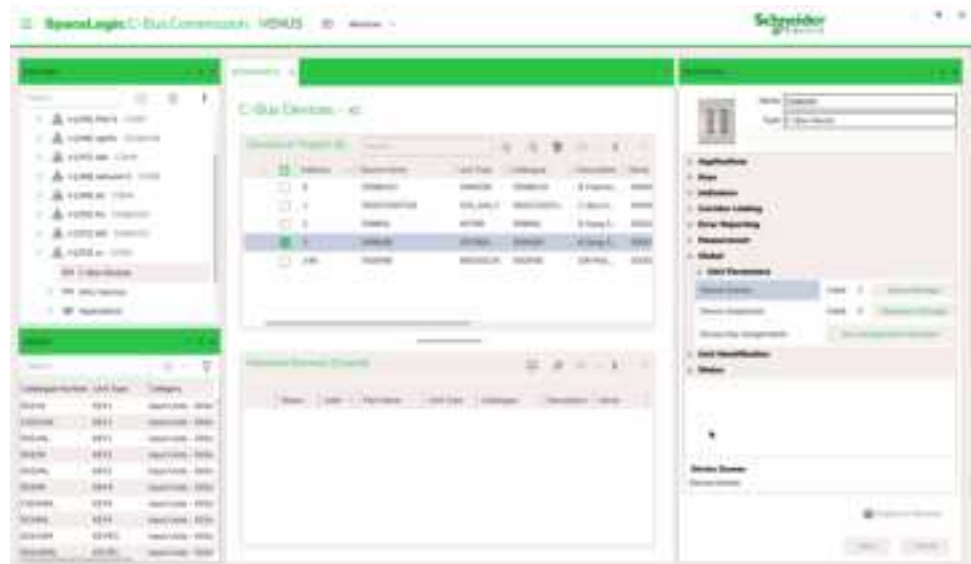
Once configuring relays are completed, click **Save** to save the changes.

Scene Manager

The **Scene Manager** allows to create, edit and manage scenes for selected C-Bus Device.

New scene items can be added to scenes using any of the available C-Bus group applications 1 to 4 defined for this device.

Some of the functions of scene manager is as demonstrated as below:



To edit the group name:

1. Select the group and click **Edit Group**.
2. Enter the new group name.

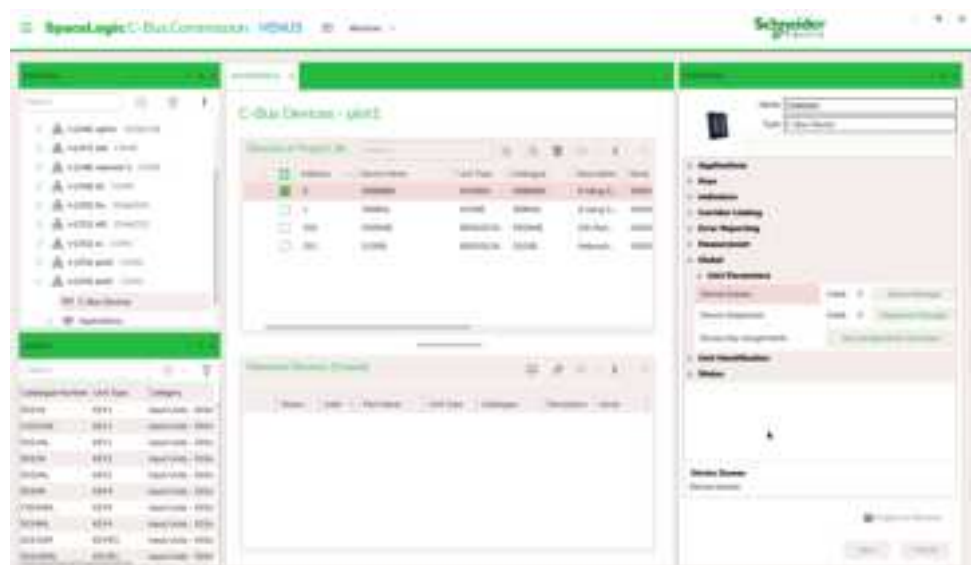
Clear Scene: **Clear Scene** clears all the scene items in the list irrespective of being selected.

Remove Scene: **Remove Scene** removes only the selected scene items from the list back to the group list. (can also remove scene by selecting scene and clicking )

Sequence Manager

The **Sequence Manager** can create, edit and manage sequences for the selected C-Bus Device. New sequence items can be added to sequences using the available Action types and configured separately.

Some of the functions of **Sequence Manager** is as demonstrated as below:



Clear Sequence: Clear sequence clears all the scene items in the list irrespective of being selected.

Remove Sequence: Remove sequence removes only the selected scene items from the list (can also remove scene by selecting scene and clicking )

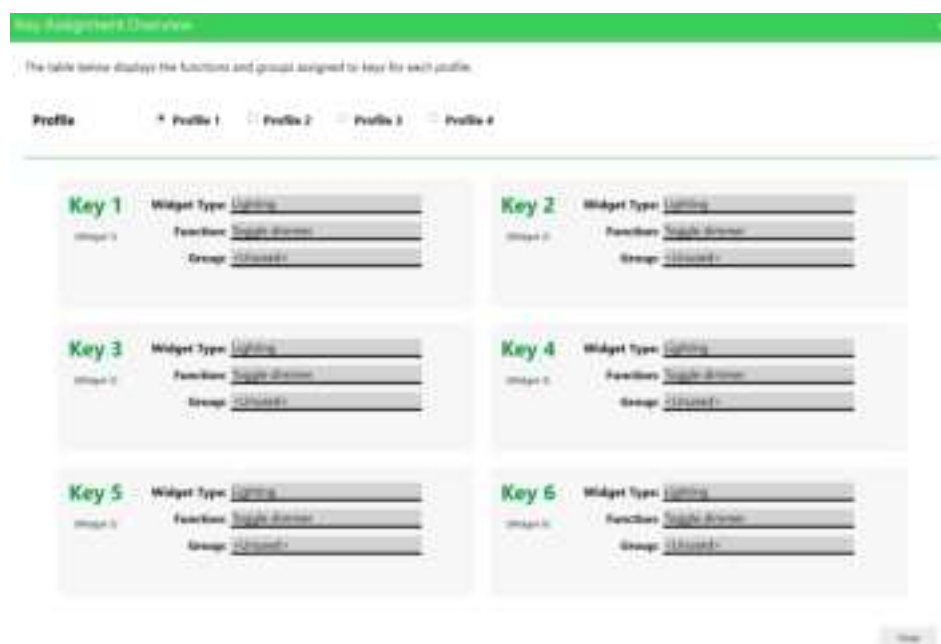
Action Types	Sequence Items				
Delay	Time: Allows to set the delay in M:S				
Lighting	Group: Allows to select from defined application.	Level: Allows to set the level value Setting the Level value will automatically update the Percentage value.	Percentage: Setting the Percentage value will automatically update the Level value.	Ramp Rate: Allows to set the ramp rate between 4-17 min. By default it is instant.	
Trigger	Trigger Group: Allows to select from available Trigger groups in Application.	Action Selector: Allows to select from available Action Selectors in selected Trigger group.	—		
Enable	Enable Group: Allows to select from available Enable groups in Application.	Value: Allows to select from available Enable Values in selected Enable group.			
Security	Arm Mode The different arm modes are: • Away mode • Night (home) mode • Day mode • Vacation mode • Highest possible				
Lighting Label		Groups: Allows to select from defined application.	—	Language: English (By default and the only language).	Variant: By default has value 1, and ranges from 1 to 4.
Scene Trigger Label	Label: Allows to define max. 8 labels, edit label name and duplicate the labels.	Trigger Group: Allows to select from predefined Trigger Group, or add a new by editing the name.	Action Selector: Allows to select from predefined Action Selector, or add a new by editing the name.		
Audio	Zone: Zones available in the range of 0 to 23.	Action: Allows to choose action between:	Set Volume to Level Provided.	Volume: Allows to set volume between 0 – 100%.	Ramp Rate: Ramp rate ranges from Instant, 4 sec to 17 mins.
			Set Source to source Provided.	Source: Zones with available levels ranging from 0 to 7.	

Media Transport	Media Link Group: Address selection range limited to 0 to 31.	Action: Allows to choose action between: • Set Power • Set Shuffle • Set Repeat • Set Motion • Set Category: Value ranges from 0 - 127. By default, value is 0. • Set Selection: Value ranges from 0 - 32767. By default, value is 0. • Set Track: Value ranges from 0 - 16777215. By default, value is 0.	To: Allows to choose operation for selected action from the below options: • Power Off • Power On • Shuffle Off • Shuffle On • Repeat Current • Repeat Off • Repeat Track • Stop • Play • Pause • Resume
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Key Assignment Overview

The **Key Assignment Overview** window displays a high-level view of the Widget/Function to key mapping per **Profile**.

- Window allows to select each profile as desired (1 to 4).
- The key layout of the window displays the list of keys in the order of 1 to 6 from left to right, and then top to bottom.



NOTE: Each key has a list of widget summary depending on the widget type.

Widget Type	Functions	Properties	Content
Lighting	All	- Widget Type - Function - Group	- Name of Widget Type - Name of Function (All Functions) - Group as configured in Widget (by name)
Timer			
Shutter Relay			
Enable			
Fan Cycle			
Audio			
Linked			
Multi Toggle			
Scene	All	- Widget Type - Function - Trigger Group - Action Selector	- Name of Widget Type - Name of Function (All Widget Functions) - Trigger Group as configured in Widget (by name) - Action Selector as configured in Widget (by name)
Sequence			

If a key is configured with more than one widget, the key displays UP/DOWN arrows for the user to cycle through all the widgets configured to the key.



The widget configuration for all keys across all profiles is visible. By default, (if a key is not configured) the Key displays the **Lighting** widget type and <Unused> function with the following default properties:

- Widget Type – <Unused>
- Function – <Unused>
- Group – <Unused>

The data/information displayed in the **Key Assignment Overview** dialogue window is read-only.

Output Units

The output units control the electrical power going to lighting or other electrical devices such as fans and motors. These units fall into categories that are strongly related to the electrical devices which they power, such as relays and dimmers. Relays are designed to control fluorescent bulbs and other non-dimming electrical devices. Dimmers are designed to accommodate electrical devices which use dimming.

The Devices under Output unit category is as listed below:

- [Dimmers, page 199](#)
- [Relays, page 224](#)

Dimmers

SpaceLogic C-Bus provides a range of dimming capabilities for Digital dimmers.

To configure digital dimmers, [click here, page 199](#)

Digital Dimmers

The SpaceLogic C-Bus Digital Dimmers are new-generation lighting control dimmers that helps to allow full customization for elegant control of dimmable LED lights and other light sources. The C-Bus dimmer is compatible with a range of load types.

- Trailing edge for incandescent and capacitive input electronic transformer based LV lighting.
- Leading edge for iron-core transformer based LV or neon lighting and other inductive loads.

Unit Types

- DIMDD8 (5508D1D, 8 Channel 1A DIN Digital Dimmer with switchable C-Bus Power Supply)
- DIMDD4 (5504D2D, 4 Channel 2A DIN Digital Dimmer with switchable C-Bus Power Supply)
- DIMDH4 (5504DHD, 4 Channel High Power DIN Digital Dimmer with switchable C-Bus Power Supply)

To convert old dimmers to new dimmers, [click here, page 220](#).

To upgrade Digital Dimmer firmware, [click here, page 35](#).

To confirm channel dimming mode via live networks, [click here, page 223](#).

To enable/disable **Inbuilt C-Bus Power Supply** function for the Digital Dimmers, [click here, page 218](#).

WARNING

Dangerous voltages may be present on the output of dimmer channels even though the dimming level is set to zero.

Avoid the risk of electrical shock that could result in death or serious injury by disconnecting the unit from mains power before accessing the output terminals or any connected wiring. This condition is found on many dimming products.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

The field information to configure SpaceLogic C-Bus Dimmers is as explained below:

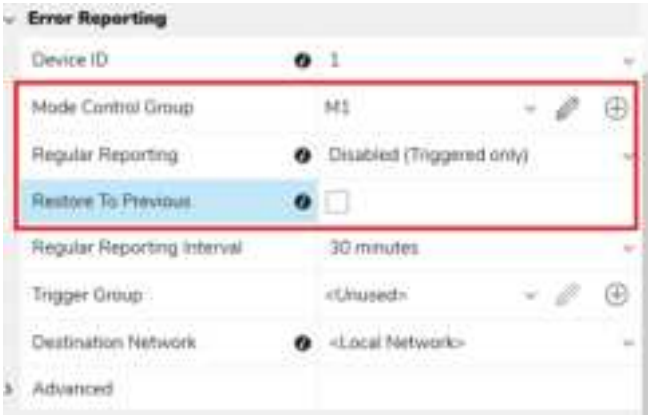
Name	This field allows to modify the Dimmer device name.
Type	This field displays the default device type.
Applications	This section displays the lighting applications supported by the dimmers. Up to four lighting applications can be defined and then used throughout the configuration of the dimmers.
NOTE: Name, and Type are database properties only and not stored in device.	

Channels NOTE : - DIMDD8 will have 8 channels - DIMDD4 will have 4 channels	Group This field allows to program group addresses associated with dimmer channels. You can: - Select group address using drop-down list. - Modify group address using . - Add group address using . - Create a new group name which takes the next available address (it's a fast commissioning option).	
	Dimming Mode	This field allows to select type of the Dimming Mode: Trailing Edge (TE) or Leading Edge (LE) .
	Channel Name	This field allows to define the channel name of the dimmer.
	Channel Location	This field allows to define the channel location of the dimmer.
	Advanced	Min Level This field allows to set the minimum level in percentage.
		Max Level This field allows to set the maximum level in percentage.
		Warn Before off Time This field allows to set the warn before off time. By default, it is Not enabled .
		Load Profile Load profile feature allows to set the dimming channel to operate on specific load. By default, the inbuilt load profile is connected to the dimming mode selected. Maximum of 4 custom profiles can be selected using drop-down list. Custom load profile can be modified using  . For more details, click here, page 207 For more details on custom profile live testing, click here, page 212 .
		Dimming Curve For more details, click here, page 216 .
		Power Recovery This field allows to set the power recovery percentage. By default, it is Restore To Previous.
		Power On Delay This field allows to set the Power On Delay in hours: seconds format.
	Logic	Type This field allows to select the type of the logic group.
		Logic Group This field allows to program logic group addresses associated with dimmer channels. You can: - Select group address using drop-down list. - Modify group address using . - Add group address using . - Have maximum 4 logic groups.

Warn Before off This section indicates warning off before the group address is turned off (1–15 minutes) based on the timings set.	Warn Before off Enable Group It also allows to create a new group name which takes the next available address. In this section, you can : • Create a enable group using . • Modify existing group using . By default, it is unused. If enable group is created, Restore To Previous is enabled. By typing new name in <unused> space allows you to create a new group name which takes the next available address.	Restore To Previous If Restore To Previous is unchecked, recovery level is enabled to set. By default, Restore To Previous is checked. Recovery Level Recovery level percentage can be from 0 – 100%
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Remote On/Off	This field allows to choose the combinations of Remote On and Off for each individual channels. NOTE : • DIMDD8 will have 8 channels • DIMDD4 will have 4 channels
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Error Reporting	Firmware Version	Applicable for firmware version below 1.1.0	Applicable for firmware version above 1.1.0
This section displays the fields for error reporting	Device ID	This field displays the unit address of the device. NOTE: The Device ID is for the entire device and is as same for Measurement section.	This field displays the unit address of the device. NOTE: The Device ID is for the entire device and is as same for Measurement . When you assign a Device ID, and then if you set the Device ID to Not Assigned , then all properties in both the Error Reporting and Measurement section are reverted to their default settings and disabled (grey out state).  Mouse over on the Device ID info icon to view the tooltip message. 
	Mode Control Group	This field allows to add an enable group (0–254). If you assign a group, Restore To Previous field is displayed and Regular Reporting Interval drop-down is enabled. If you uncheck Restore To Previous check box, Regular Reporting field will be enabled. If you check Restore To Previous check box, Regular Reporting will be disabled.	

			
	Regular Reporting	This field configures the Error Reporting mode of the Dimmers into one of three modes: • Triggered only: Errors are reported only when triggered by the assigned Trigger Group. • Always ON, most recent only: The most recent errors are reported automatically at a regular time interval (time set by the Regular Report Interval field). • Always ON, most recent and most severe: The most recent and most severe (or latched) errors are reported automatically at a regular time interval (time set by the Regular Report Interval field).	This field configures the Error Reporting mode of the Dimmers into one of the modes: • Disabled (Triggered only) • All Errors, Most Recent only: • All Errors, Most Recent and Most Severe (Mode 2) • Minimum Errors, Most Recent only (Mode 3) • Minimum Errors, Most Recent and Most Severe (Mode 4) All the modes can be set with the regular reporting interval set to No regular reports, which allows live reporting of errors without the regular reports. Mouse over on the Regular Reporting info icon to view the tooltip message.
		Restore to Previous If selected, this field restores the data on power failure.	When you click Save with the below conditions: • Mode Control Group — Assigned • Restore to Previous — Checked • Regular Reporting — Disabled state The Regular Reporting displays the last saved value. Mouse over on the Restore to Previous info icon to view the tooltip message. 
	Regular Reporting Interval	This field is used to select the time interval period between the completion of a regular report and beginning of the next report in Always On, Most recent only and Always On, Most recent and most severe modes. By default, the interval is 30 minutes. Regular reporting interval is enabled for Trigger only mode.	
	Trigger Group	This field contains a Trigger Group to trigger an error reporting event for any of the three error reporting modes. When a Trigger group is created, resend and acknowledge action selector are displayed. The Resend Action Selector is set to send all errors and Acknowledge Action selector is set to acknowledge all errors.	
	Destination Network	This field contains the destination C-Bus network to which the Dimmers routes the error reporting messages. This allows the error messages to be sent to a remote C-Bus network for central monitoring if it's not the local network.	

		Mouse over on the Destination Network info icon to view the tooltip message.	
	Advanced	C-Bus Voltage Warning Set Threshold	- By default, Disabled is selected. - The value selected must be less than the C-Bus Voltage Warning Clear Threshold value selected. - If the C-Bus Voltage Warning Clear Threshold is Disabled, then setting a value here will also set the C-Bus Voltage Warning Clear Threshold value to (current C-Bus Voltage Warning Set Threshold value + 1 V). Mouse over on the C-Bus Voltage Warning Set Threshold info icon to view the tooltip message.
		C-Bus Voltage Warning Clear Threshold	- By default, Disabled is selected. - The value selected must be greater than the C-Bus Voltage Warning Set Threshold value selected. - If the C-Bus Voltage Warning Set Threshold is Disabled, then setting a value here will also set the C-Bus Voltage Warning Set Threshold value to (current C-Bus Voltage Warning Clear Threshold value - 1 V). Mouse over on the C-Bus Voltage Warning Clear Threshold info icon to view the tooltip message.
		C-Bus Voltage Critical Set Threshold	- By default, Disabled is selected. - The value selected must be less than the C-Bus Voltage Critical Clear Threshold value selected. - If the C-Bus Voltage Critical Clear Threshold is Disabled, then setting a value here will also set the C-Bus Voltage Critical Clear Threshold value to (current C-Bus Voltage Critical Set Threshold value + 1 V). - If the C-Bus Voltage Warning Set Threshold has a value set (other than Disabled), then the value selected must be less than (current C-Bus Voltage Warning Set Threshold value). Mouse over on the C-Bus Voltage Critical Set Threshold info icon to view the tooltip message.
		C-Bus Voltage Critical Clear Threshold	- By default, Disabled is selected. - The value selected must be greater than the C-Bus Voltage Critical Set Threshold value selected.

			If the C-Bus Voltage Critical Set Threshold is Disabled, then setting a value here will also set the C-Bus Voltage Critical Set Threshold value to (current C-Bus Voltage Critical Clear Threshold value - 1 V). Mouse over on the C-Bus Voltage Critical Clear Threshold info icon to view the tooltip message.
		C-Bus Power Supply Warning Set Threshold	- By default, Disabled is selected. - The value selected must be greater than the C-Bus Power Supply Warning Clear Threshold value selected. - If the C-Bus Power Supply Warning Clear Threshold is Disabled, then setting a value here will also set the C-Bus Power Supply Warning Clear Threshold value to (current C-Bus Power Supply Warning Set Threshold value - 10 mA) Mouse over on the C-Bus Power Supply Warning Set Threshold info icon to view the tooltip message.
		C-Bus Power Supply Warning Clear Threshold	- By default, Disabled is selected. - The value selected must be less than the C-Bus Power Supply Warning Set Threshold value selected. - If the C-Bus Power Supply Warning Set Threshold is Disabled, then setting a value here will also set the C-Bus Power Supply Warning Set Threshold value to (current C-Bus Power Supply Warning Clear Threshold value + 10 mA). Mouse over on the C-Bus Power Supply Warning Clear Threshold info icon to view the tooltip message.
		Unit Over Temperature Set Threshold	This field is a combo box which is by default set to 70° C . The Unit Over Temperature Set Threshold property increments by 1° C with a range of 1° C - 80° C. Mouse over on the Unit Over Temperature Set Threshold info icon to view the tooltip message.
		Unit Over Temperature Clear Threshold	This field is a combo box which is by default set to 65° C . The Unit Over Temperature Clear Threshold property increments by 1° C with a range of 0° C - 79° C. Mouse over on the Unit Over Temperature Clear Threshold info icon to view the tooltip message.

	Firmware Version	Applicable for firmware version below 1.1.0			Applicable for firmware version above 1.1.0	
Measurement	Device ID	This field displays the unit address of the device NOTE: The Device ID is for the entire device and is as same for Error Reporting section.			This field displays the unit address of the device. NOTE: The Device ID is for the entire device and is as same for Error Reporting section. When you assign a Device ID, and then if you set the Device ID to Not Assigned , then all properties in both the Error Reporting and Measurement section are reverted to their default settings and disabled (grey out state). Mouse over on the Device ID info icon to view the tooltip message.	
	Send Trigger Group	This field contains a trigger group to request the Dimmers to send its stored measurement data. Mouse over on the Send Trigger Group info icon to view the tooltip message.				
	Clear Trigger Group	This field contains a trigger group to clear the stored measurement data in the dimmers. Mouse over on the Clear Trigger Group info icon to view the tooltip message.				
	Regular Broadcast Interval	NA			Disabled by default. Can set the intervals between 1 min to 4 hours.	
	Regular Broadcast Option	NA	All		Enabled by default	
			Lamp Hours		Selected and Disabled by default	
			Channel Temperature		Selected and Disabled by default	
			Power Supply Current		Selected and Disabled by default	
			C-Bus Voltage		Selected and Disabled by default	
			Unit temperature		Selected and Disabled by default	
		NOTE: Deselecting all will enable each of the individual check box options.				
Destination Network	This field contains the destination C-Bus network to which the dimmer routes measurement application messages. Mouse over on the Destination Network info icon to view the tooltip message.					
The action selector for trigger groups is as explained below:	Virtual Channel Number	Property	Units	Reset	Notes	
	0 – 15	Lamp Running Time	Hours	Yes	NA	
	16 – 31	Channel Voltage	Volts	No	Units with power metering only	
	32 – 47	Channel Current	Amperes	No		
	48 – 63	Channel Power	Watts	No		
	64 – 79	Channel Energy	Watt-hours	Yes		
	80 – 95	Channel Lifetime Energy	Watt-hours	No	Dimmers only	
	128 – 143	Channel Temperature	Celsius	No		

		252	C-Bus Power Supply Output Current	Amperes	No	NA
		253	C-Bus Voltage	Volts	No	NA
		254	Unit Temperature	Celsius	NA	NA
		Measurement Application supports various operational parameters for triggered request. Measurement Request Trigger Group defines the Trigger Group for the request. A trigger's Action Selector determines which measured parameter is requested. NOTE: Action Selector 0xFF requests all measurements (in which they are sent 2 at a time with an interval of 2 seconds). Other Action Selector values can be used to request individual measured properties corresponding to the virtual channel number as per the above table. The DEVICE ID for the Measurements is defined by the Device ID parameter, the same Device ID is used for Error Reporting. The Device ID will be unique per network to differentiate measurements from different devices. The devices monitoring the Measurement messages should keep track of the source network to differentiate if Device IDs are reused across multiple C-Bus networks. If the Device ID parameter is left at its default value of 0xFF then the Unit Address is used as the Device ID in the Measurement Application messages, which ensures uniqueness. However, if the device is readdressed then any monitoring devices will also needs to be updated to match the new Device ID (It is recommended to leave the Device ID as the default value).				

Logic Groups Dimmers can have maximum 4 logic groups each group having respective channels (8 or 4)	Group This section will allow to create a enable group using  and modify existing group using  . By default, it is unused. If enable group is created, Restore To Previous is enabled.	
	Power Recovery This field allows to set the power recovery percentage. By default, it is Restore to previous.	
	Channel NOTE : - DIMDD8 will have 8 channels - DIMDD4 will have 4 channels	

Global This section displays the project properties set by the user at the time of creation of the project.	C-Bus Clock	If checked, allows you to enable the C-Bus clock for the dimmers.
	Disable Local Toggle	If checked, disables the local toggle.
	Network Hardware Burden	If checked, the physical hardware burden is plugged into the device. By default, it is unchecked.
	Inbuilt C-Bus Power Supply	If checked, the power supply is enabled/active. By default, it is unchecked.
	Disable Dimmer Mode Change	If checked, disables the dimmer mode change.
	Disable Power Supply Toggle	If checked, disables the power supply toggle.
	Disable C-Bus Priority	If checked, disables the C-Bus priority.
	Disable Clock Generator Toggle	If checked, disables the clock generator toggle.

Unit Identification This section display the fields for identification of the unit.	Unit Type	This field contains the unit type and unit description of the device.
	Catalog Number	This field contains the catalog number related to the unit type.
	Firmware Version	This field shows the version number of the C-Bus interface firmware which exists on the physical network or which has been assigned to a logical representation of the unit in the database.
	Part Name	This field contains the part name which is stored in the unit hardware, which can be modified.
	Unit Address	This field displays the unit address assigned to the device.

	Serial Number	This field contains the serial number which exists on the physical network.
	Tag Name	This field contains the name that user can give to the logical representation of the unit. This name can be up to 32 characters long and is stored in the project database only.
	Notes	This field contains a location to add notes about the unit which is stored in the project database only.

Status The Status section contains information about the C-Bus network related functions located on the unit.	Device Status This section displays the details of hardware.	Hardware Version	This field displays the hardware version of the device.
		Firmware Version	This field displays the firmware version of the device.
		C-Bus Clock Active	This field indicates whether the C-Bus internal clock is currently enabled on the Dimmers on the network.
		C-Bus Voltage (V)	This field displays the C-Bus voltage of the device.
		Inbuilt C-Bus Power Supply Active	This field displays whether the Inbuilt C-Bus Power Supply Active is On or Off.
		Power Supply Load	This field displays the load of the power supply (mA).
		Power Supply Output Voltage	This field displays the power supply output voltage (mV) of the device.
		Load Power	This field displays the load power (mW) of the device.
		Unit Temperature	This field displays the unit temperature (°C) of the device.
	Channel Status Each channel will have these channel status. NOTE : - DIMDD8 will have 8 channels - DIMDD4 will have 4 channels	Load Compatibility	This field displays the status of load incompatibility (Yes/No).
		Dimming Mode	This field displays type of the dimming mode.
		Offline	This field displays the status of the device (Yes/No).
		Dimming Mode Error	This field displays the status of dimming mode error (Yes/No).
		Temperature Wind Back	This field displays the status of temperature wind back (Yes/No).
		Temperature Shut Down	This field displays the status of temperature shut down (Yes/No).
		Over Current	This field displays the status of over current (Yes/No).
		Operating Temperature	This field displays the value of the temperature.
		Mains Frequency	This field displays the value of the mains frequency.

Once configuring dimmers is completed save the changes.

Load Profile

By adjusting settings within each dimmer channel, a Load Profile tailors dimming behavior for better end-to-end performance.

Inbuilt Load Profiles and the Inbuilt Dimming Curve have the pre configured settings which cannot be modified. If the acceptable results cannot be utilized with the load being used, the settings are customized and applied to a dimmer channel.

A Custom file can also be saved and used within other channels of the dimmer and also shared across other compatible dimmer devices.

Default Dimmer Channel Profile is selected to be the most universal. There are 4 user-configurable dimmer channel profiles. Each channel can be assigned to any one of these 5 profiles. In each case there is a improvement for the light source behavior during dimming, the load profile can be adjusted by the SpaceLogic C-Bus Commission Software.

NOTE: The Load Brand, Load Model, Load Quantity, Custom Notes, Load Type and Mains Frequency fields are saved as project settings only. Furthermore, the Load Type and Mains Frequency selections determine the values presented in the Custom Load Profile section.

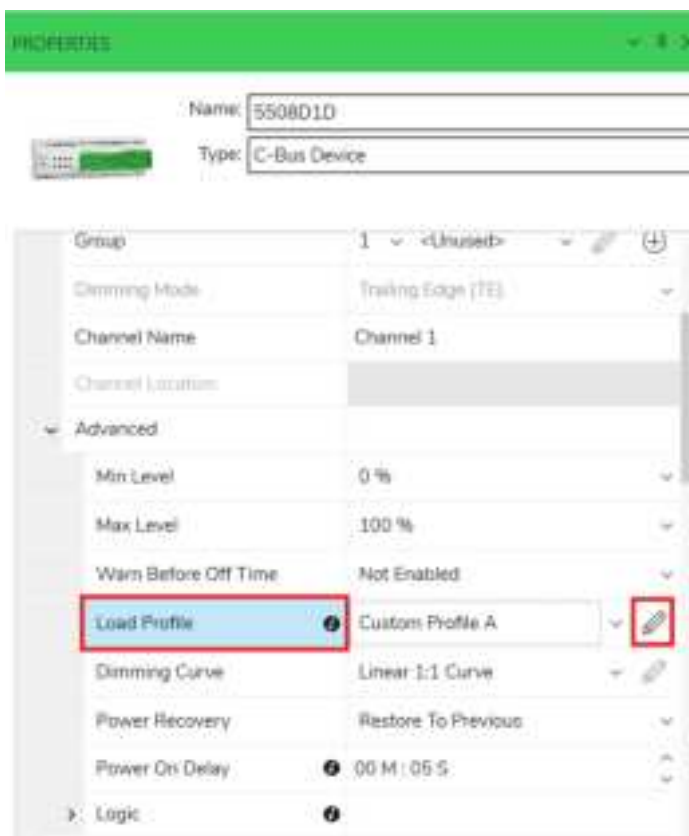
The SpaceLogic C-Bus Commission software allows:

- The customizing of the load profiles per channel.
- 4 user configurable profile per channel/device.
- Saving and sharing of endless load profiles for future project uses.
- Different load types:
 - LED Lighting (TE Dimmable)
 - LED Lighting (LE Dimmable)
 - Electronic Transformer (TE Dimmable)
 - Electronic Transformer (LE Dimmable)
 - Incandescent Lighting (TE Preferred)
 - Incandescent Lighting (LE)
 - Iron Core Transformer (LE)
 - Sweep Fan (LE)
 - Exhaust Fan (LE)
 - Other (LE)
 - Other (TE)

To create a customized load profile:

1. Under **Advanced** section of Channels, select any **Custom Profile** option from **Load Profile** drop-down.

2. Click .



PROPERTIES

Name: 5508D1D

Type: C-Bus Device

Group: 1 <Unused>

Dimming Mode: Tracking Edge (TE)

Channel Name: Channel 1

Channel Location:

Advanced

Min Level: 0 %

Max Level: 100 %

Warn Before Off Time: Not Enabled

Load Profile Custom Profile A

Dimming Curve: Linear 1:1 Curve

Power Recovery: Restore To Previous

Power On Delay: 00 M : 05 S

Logic:

Custom Load Profile and Dimming Curve window is displayed. The load profile customizing is done in **Configuration** tab.

For 50 Hz



Custom Load Profile and Dimming Curve

Configuration **Setting**

If Load Profile outputs correct settings within each dimmer channel until before the dimming behavior to improve the end-to-end dimming experience.

Valid load profiles and the valid dimming curve contain one or more settings which cannot be modified. If acceptable results cannot be achieved with the load being used, the settings can be customized and then applied to a dimmer channel. A Custom Profile can also be saved and used with other channels of the dimmer and also shared across other compatible devices. However, Note: The Load Brand, Load Model, Load Quantity, Custom Name, Load Type and Mains Frequency fields are used as project settings only. Furthermore, the Load Type and Mains Frequency settings determine the values presented in the Custom Load Profile screen.

Load Brand: Load Model: Load Qty: 0

Custom Name:

Load Type: LED Lighting/TE Dimmed Dimming Mode: Tracking Edge (TE) Mains Frequency: 50 Hz

Minimum Brightness	10%	0% - 100%
Maximum Brightness	100%	100% - 100%
Soft Turn On	0.05s	0.05s - 0.20s
Soft Turn Off	0.05s	0.05s - 0.20s
Substant Duration	0.5s	0.1s - 10.0s
Minimum Brightness	100%	0% - 100%
Minimum Fade On	0.05s	0.01s - 0.20s
Minimum Recovery	0.5s	0.1s - 10.0s

Search: Read From File: Cancel: OK

Autosave is enabled for 1 minute

For 60 Hz



NOTE: The Custom Load Profile parameter values varies depending on the load type selected.

- The lower limit for the **Soft Turn On** property is calculated dynamically. However the lower limit value is no less than 0.01.
- The lower limit for the **Soft Turn Off** property is calculated dynamically. However the lower limit value is no less than 0.01.
- The lower limit for the **Kickstart Brightness** is based on Minimum Brightness + 10.
- The lower limit for the **Kickstart Turn On** property is calculated dynamically. However the lower limit value is no less than 0.01.
- Selecting a **Load Type** will load specific values based on the selection of the **Mains Frequency** property.

IMPORTANT: When deploying a DIMDD8 / DIMDD4 dimmer, the dimming mode of each channel of the dimmer device loaded into the **Property Editor** are compared to the live dimmer device. If there is a conflict in the dimming mode of a channel :

A **Channel Dimming Mode Conflict** window is displayed prior to deployment.



- Click **Yes** to resolve the conflict and deploy.
 - Click **No** to cancel the deployment.
3. SpaceLogic C-Bus Commission enables saving, uploading or sharing of load profile files which includes the following :
- **Load Brand**
 - **Load Model**
 - **Load Quantity**
 - **Custom Notes associated with the load**
 - **Load Type**
 - **Read-only dimming mode**
 - **Mains Frequency**

Dimming setting includes the following:

Minimum Brightness	1800		500 - 4000
Maximum Brightness	8000		1900 - 9500
Soft Turn On	0.50	sec	0.06 - 2.00
Soft Turn Off	0.50	sec	0.06 - 2.00
Kickstart Duration	☐ 0	sec	0.1 - 150.0
Kickstart Brightness	1000		1810 - 8000
Kickstart Turn On	0.12	sec	0.01 - 4.00
Kickstart Recovery	0.1	sec	0.1 - 120.0

4. To edit the preset values, click on the value and type new value within the range which is mentioned next to the parameter.
5. Click  to reset the parameter values.

Minimum Brightness: Sets the level where the load operates or is visibly On.

Maximum Brightness: Sets the level where the load exhibits no further change in brightness or output.

Soft Turn On: Sets the role of change for Instant Ramps. The value is the time taken to transit from Off to Maximum Brightness. This value can also affect the timing of C-Bus Ramps between levels and the output of a dimming curve, which is set to 1 second or less.

Soft Turn Off: Sets the role of change for Instant Ramps. The value is the time taken to transit from Off to ON.

Kickstart Duration: When enabled, sets the duration to maintain the Kickstart Brightness level before recovering to a lower level if set.

Kickstart Brightness: When enabled, sets the dimmer Kickstart Minimum Brightness level before when transition from Off to On (at any level).

Kickstart Turn On: When enabled, sets the time in which the Kickstart Brightness level is applied to the load. A value of 10 ms is a Fast or Hard Start (same as a switch). This value is recommended to be set to Fast between 0.010 to 0.100 seconds.

Kickstart Recovery: When enabled, sets the time taken at the end of the Kickstart duration to transition from the Kickstart Brightness level to the currently set level of the load.

If the set level is less than the Kickstart Brightness level, this value is set to Slow to achieve a smooth unnoticeable transition at the end of the kickstart.

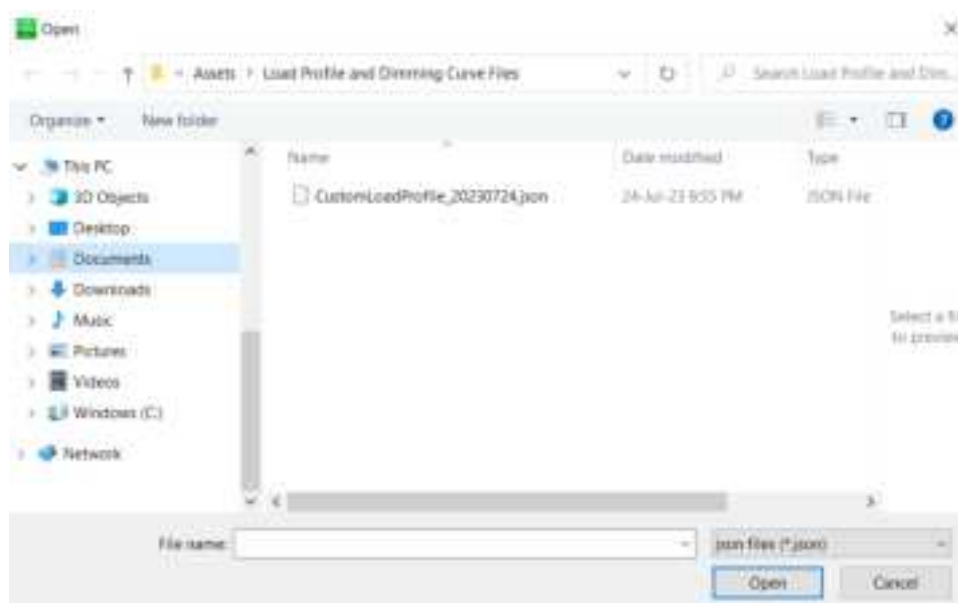
To reset both **Load Profile and Dimming Curve** set values, click **Reset All**.

Enter the required information in **Load Brand**, **Load Model**, **Load Quantity** and **Profile notes** and click **OK**.

The custom load profile settings created can be saved and used for other dimmer channels and dimmer devices by exporting the settings using **Save To File**. The Save to file is enabled once there is a change in the settings.

The exported custom load profile can be reloaded to use for other dimmers using **Read From File**. This will open the folder consisting of JSON files in the path **Assets > Load Profile and Dimming Curve Files**.

Select the file and click **Open**.



Custom Profile Live Testing

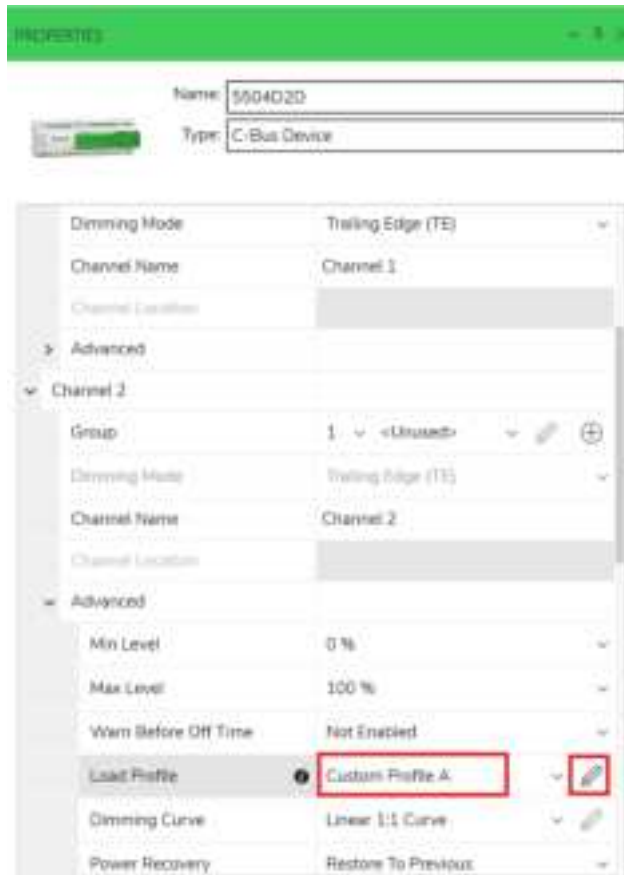
Custom Profile Live Testing allows you to quickly identify and define the minimum and maximum conduction values for a dimmer channel. It uses a direct connection to the dimmer and provides live control of the connected load, without repetitive deployment including:

- Maximize dimming range of connected lights.
- Mask erratic behavior of lights at low brightness levels.
- Mask little/no change in response of lights at high C-Bus control levels.
- Define attributes from live testing rather than experimenting or guessing values to try.

NOTE: The maximum conduction value has been changed to 9000 for High-powered dimmer (DIMDH4) and to 9500 for other dimmers.

To perform live testing on the dimmer:

1. In the **PROPERTIES** window, select any custom profile from the **Load Profile** drop-down and click .



The screenshot shows the 'PROPERTIES' window for a 'C-Bus Device'. The 'Name' field is '5504020'. The 'Type' is 'C-Bus Device'. The 'Dimming Mode' is 'Trailing Edge (TE)'. The 'Channel Name' is 'Channel 1'. The 'Channel Location' is empty. The 'Advanced' section is expanded, showing 'Channel 2'. The 'Group' is '1' and 'Unused'. The 'Dimming Mode' is 'Trailing Edge (TE)'. The 'Channel Name' is 'Channel 2'. The 'Channel Location' is empty. The 'Advanced' section for Channel 2 is expanded, showing 'Min Level' at '0 %', 'Max Level' at '100 %', 'Warn Before Off Time' as 'Not Enabled', 'Load Profile' as 'Custom Profile A' (highlighted with a red box), 'Dimming Curve' as 'Linear 1:1 Curve', and 'Power Recovery' as 'Restore To Previous'.

Custom Load Profile and Dimming Curve window is displayed.

2. You can perform live testing in the **Testing** section. The **Testing** tab is disabled initially and becomes enabled when the following conditions are met:
- The C-Bus Network must be opened and scanned.
 - If the dimmer is invoked from project, dimmer must be partial or fully matched.
 - A group address must be set or configured to the channel.



The **Testing** tab displays the below properties of the dimmer:

- Dimmer Device Name.
- Dimmer Channel Name.
- Current configured **Load Profile** for the channel.
- Current configured **Dimming Curve** for the channel.
- Current configured **Dimming Mode** for the channel.
- Current configured **Mains Frequency** for the channel.

3. Click  to start the testing.

NOTE: The testing operation places the current dimmer channel into test mode, allowing you to explore, test and confirm its dimming capability with the connected load.

4. Once the testing starts, the process takes place in three steps.

Step 1:

The screenshot shows the 'Custom Load Profile And Dimming Curve' software interface. The 'Testing' tab is active. The 'Minimum Brightness' is set to 50. The 'Channel' is 'Channel 2'. The 'Dimming Mode' is 'Leading Edge 0-10V'. The 'Main Frequency' is '10 Hz'. The 'Load Profile' is 'Custom Profile A'. The 'Dimming Curve' is 'Custom Curve A'. The 'Step 1 - Find Minimum Brightness' section is highlighted with a red box. It contains instructions on how to set the minimum brightness and a 'Set Value' button. The 'Turn On' and 'Turn Off' buttons are disabled. A green arrow points to 'Step 2'.

- a. Set the lowest acceptable brightness level and click **Set Value** to set the value.

NOTE: Until you set the value and click **Set Value**, the **Turn On** and **Turn Off** buttons will be disabled.

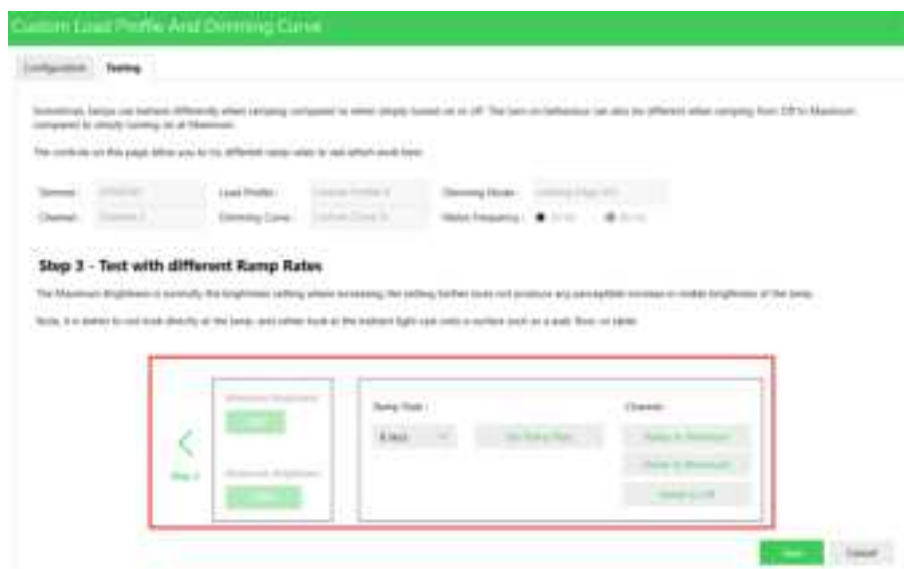
- b. Click **Turn On** to test the turn on behavior at that level.
 c. Click **Turn Off** to turn off the test at that level.
 d. Click **Step 2** to test the maximum brightness.

Step 2:

The screenshot shows the 'Custom Load Profile And Dimming Curve' software interface. The 'Testing' tab is active. The 'Maximum Brightness' is set to 100. The 'Channel' is 'Channel 2'. The 'Dimming Mode' is 'Leading Edge 0-10V'. The 'Main Frequency' is '10 Hz'. The 'Load Profile' is 'Custom Profile A'. The 'Dimming Curve' is 'Custom Curve A'. The 'Step 2 - Find Maximum Brightness' section is highlighted with a red box. It contains instructions on how to set the maximum brightness and a 'Step 3' button. The 'Turn On' and 'Turn Off' buttons are disabled. A green arrow points to 'Step 3'.

- a. Set the highest acceptable brightness level.
 b. Click **Step 3** to test the dimming response.

Step 3:



- a. Choose the ramp rate response between the **Minimum** and **Maximum Brightness** limits with the load currently connected, to test and observe the dimming behavior within the range defined in **Step 1** and **Step 2**.

The ramp rate ranges are instant, 4 secs, 8 secs, 12 secs, 20 secs, 30 secs.

- b. Click **Save**.

NOTE: If a validation error occurs, the step arrows and labels are disabled.



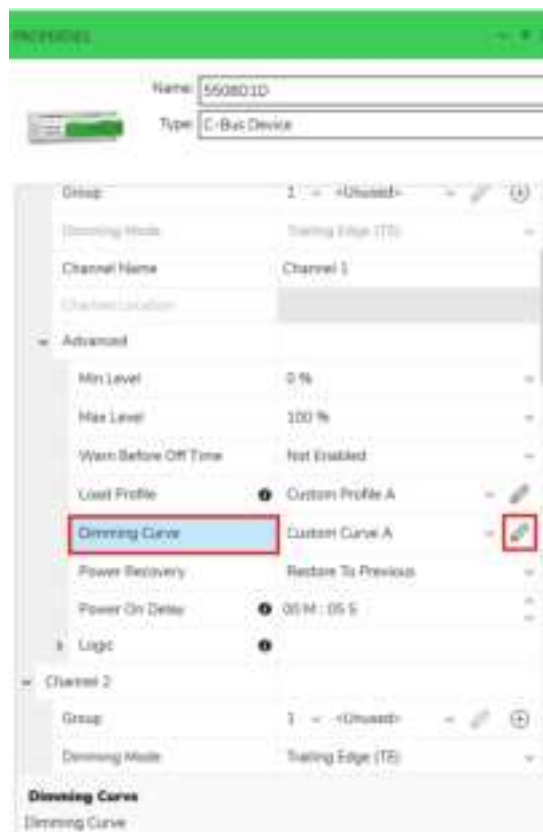
Dimming Curve

A Dimming Curve refers to a translation between input level and output level. A Dimming Curve adjusts the rate of the change of the brightness level of a dimmer channel as the C-Bus group (level) is ramped. The default dimming curve is linear.

To create a customized Dimming Curve:

1. In **Advanced** section of channels, select **Custom Curve** from the **Dimming Curve** drop-down.

2. Click .



Custom Load Profile And Dimming Curve window is displayed.

3. To add new point on chart, right click on the chart and select **Add**.
4. To change the added point, hold and drag the point to set new channel and control range value.

Once settings are completed mention curve notes and confirm **OK**.

The chart in below image represents mapping between load profile and C-Bus control range.

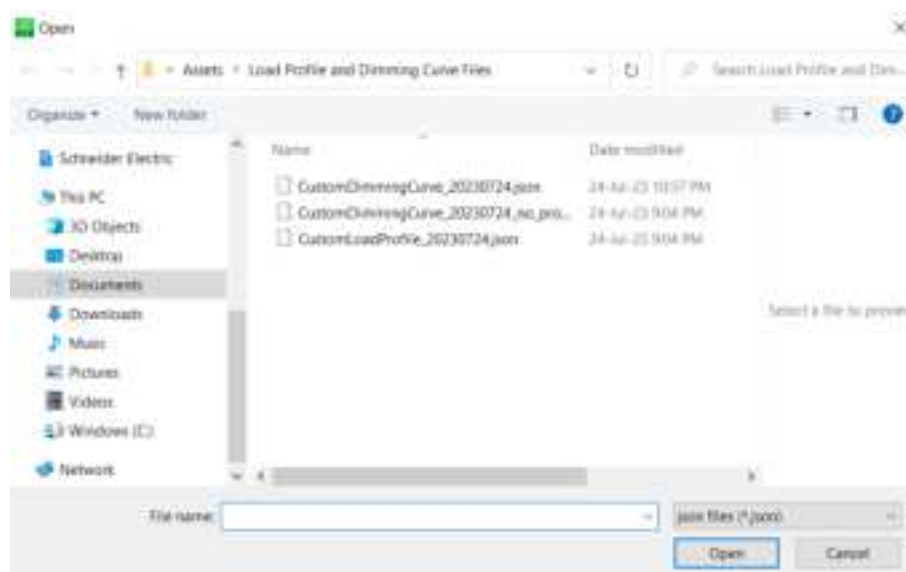


The custom dimming curve settings created can be saved and used for other dimmer channels and dimmer devices by exporting the settings using **Save To File**. The Save to file is enabled once there is a change in the settings.

- Click  to reset the setting values.

The exported custom dimming curve can be reloaded to use for other dimmers using **Read From File**. This will open the folder consisting of json files in the path **Assets > Load Profile and Dimming Curve Files**.

- Select the file and click **open**.



Inbuilt C-Bus Power Supply

SpaceLogic C-Bus Commission allows to enable/disable the "Inbuilt C-Bus Power Supply" function for the C-Bus Voltage Free Relays and Digital Dimmers.

NOTE: Enabling/Disabling C-Bus Power Supply from front panel of the respective device is also possible, refer respective Device User Guide.

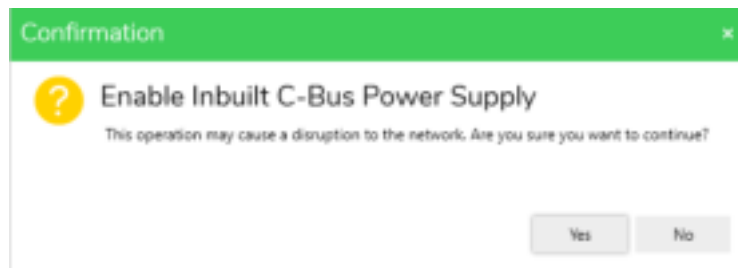
- Select a relay/dimmer unit.
- In **Properties** window, go to **Global > Inbuilt C-Bus power supply**



NOTE: Option is available only if:

- The C-Bus network is opened and scanned.
- A device is fully/partially matched.

3. Check the check box to enable 'Inbuilt C-Bus power Supply'. Confirmation message is displayed.



Confirm **Yes**



NOTE: Uncheck the check box to disable 'Inbuilt C-Bus power Supply' (By default, it is disabled). Confirmation message is displayed.



4. Confirm **Yes**. If device configuration process is successful, below message is displayed.

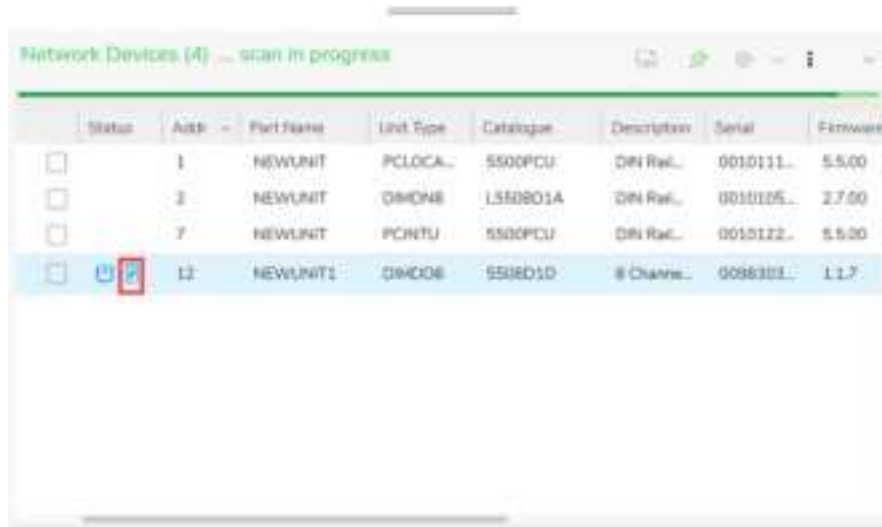


NOTE: If the device configuration process is failed, below error message is displayed.



5. The enabled 'Inbuilt C-Bus Power Supply' for a respective device is visible in *Network Device* section as shown below.

The icon  represents 'Inbuilt C-Bus Power Supply' is been enabled for the device.

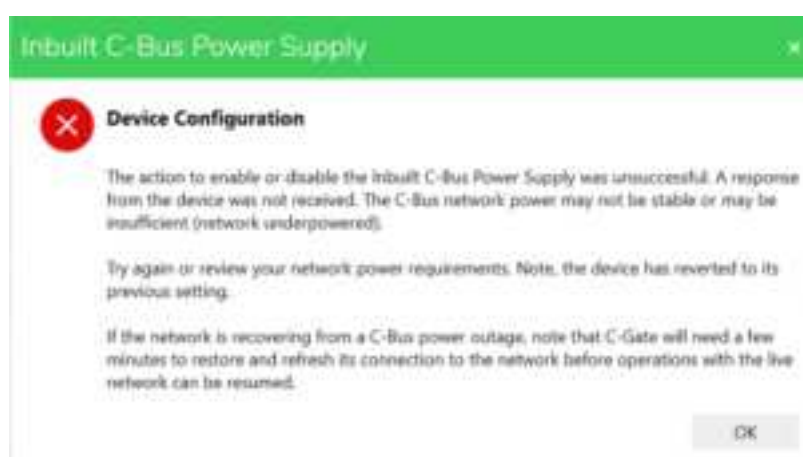


Status	Addr	Port Name	Unit Type	Catalogue	Description	Serial	Firmware
☐	1	NEWUNIT	PCLOCAL	SS00PCU	DIN Rail	0010111	5.5.00
☐	2	NEWUNIT	DMONE	LS0201A	DIN Rail	0010105	2.7.00
☐	7	NEWUNIT	PCNTU	SS00PCU	DIN Rail	0010122	5.5.00
☒	12	NEWUNIT1	DMONE	SS0201D	8 Channel	0088301	1.1.7

IMPORTANT: If the power supply enabled device is been removed from the live network and is re-added to the network, the network would be already enabled displaying following message .



If the device configuration reverting to previous settings is failed, below error message is displayed.



Dimmer Conversions

If there are old dimmers existing in the project, the SpaceLogic C-Bus Commission allows the user to convert old dimmers to digital dimmers.

Old Dimmers		New Dimmers	
Catalogue number	Unit Type	Catalogue number	Unit Type
L5508D1A	DIMDN8	5508D1D	DIMDD8
L5504D2A	DIMDN4	5504D2D	DIMDD4
L5504D2U	DIMDU4	5504D2D	DIMDD4

To convert:

1. Open the same project in commission software same as in Toolkit where the dimmer is added in network.
2. Select **C-Bus Devices** of the network.
The available devices in the project are displayed.
3. Select the dimmer that needs to be converted.



4. Right click on the **Dimmer > Convert Unit**.
Convert Unit confirmation box is displayed.



5. Select the check box and click **OK**.
The old dimmer DIMDN8 is converted to digital dimmer DIMDD8.



6. When conversion is completed:

- The address of the dimmer remains the same.
- The unit type catalogue description and firmware details are updated.
- The firmware will have the latest version.
- The serial details needs to be updated manually in property window of the device.
- The configuration changes made in old dimmer reflects in the new dimmer as well.

Table below shows the list of properties that will be restored in the digital dimmer DIMDN4 and DIMDN8:

Properties	Properties which are restored	Properties which are not restored
Project Name	Project name will be restored as in the old dimmer.	Not Applicable
Applications	Applications will be restored as in the old dimmer.	Not Applicable
Channel	◦ Group Address ◦ Channel Restore Level ◦ Power on Delay ◦ Min, Max	Not Applicable
Logic	◦ Logic Groups ◦ Assignment ◦ Min, Max	Area
	◦ Logic Recovery ◦ Logic group Restore level	Learn Mode
Power Recovery	Not Applicable	Enable Burden
Global	◦ Enable C-Bus Clock ◦ Enable Local Toggle ◦ Enable C-Bus Priority ◦ C-Bus Clock ◦ C-Bus Priority ◦ Local Toggle	
Unit Identification	◦ Unit Address ◦ Part Name ◦ Tag Name ◦ Notes	
The Serial details needs to be updated manually in the property editor.		

For DIMDU4, the following properties will be restored.

- Device ID
- Kickstart Duration
- Kickstart Brightness
- Kickstart Turn On
- Error Reporting Mode
- Error Reporting Regular Report Interval
- Error Reporting Group
- Error Reporting Trigger group
- Error Reporting Resend Action Selector
- Acknowledge All Action Selector

Along with existing, additional properties can also be configured in the new digital dimmers.

Once the conversion is completed:

1. Scan the C-Bus Network.
2. Identify new dimmer on the Network.
3. Readdress the device to match live network or readdress device to match the project database.
4. Deploy the device.

Channel Dimming mode (Live Network Service)

In **Network Device** section, right-click on the DIMDDx dimmer unit for **Confirm Channel Dimming Mode** option.

IMPORTANT: This function is available only for dimmers with firmware version v1.3 and above:

- The DIMDD8 Dimmer
- The DIMDD4 Dimmer

This function is disabled while selected dimmer device is in **Deployment Queue**.



The **Confirm Channel Dimming Mode** window consists of following information:



- **Dimmer:** Displays part name of the unit.
- **Unit Address:** Displays unit address of the unit.

Fields	Description
Channel	Displays part name of the dimmer.
Channel Dimming Mode	Displays the dimming mode of the channel.

Channel Status	Confirmed	The channel is not in error status and has dimming mode confirmed. In confirmed state, both Test and Confirm buttons are disabled.
	Not Confirmed	Channel is in not confirmed status when there is no error status, no incompatible load, and dimming mode is not confirmed. Enable Test button for specific channel, and disable Confirm button for specific channel.
	Error	If error exists, specific channel's Channel Status is updated as error or, as load compatible once the updating channel status is completed. 
	Ready to Confirm	Test of channel is completed and no errors or incompatible load states exist.
Test Channel	Enable Test button for specific channel and disable Test for other specific channels.	
Confirm Channel Dimming Mode	Enable Confirm button for specific channel.	

The **Channel Dimming Mode Conflicts** window is displayed to resolve the identified conflicts as shown below, click **Yes** to resolve.



Relays

C-Bus relay units are output devices used to switch resistive, fluorescent and inductive loads. The relay units are available with switched active outputs and voltage free variants, mechanically latching relay outputs on specific C-Bus relays.

SpaceLogic C-Bus provides a range of relays.

- Voltage Free Relays

To configure Voltage free relays, [click here](#), page 225

Voltage Free Relays

Unit Types

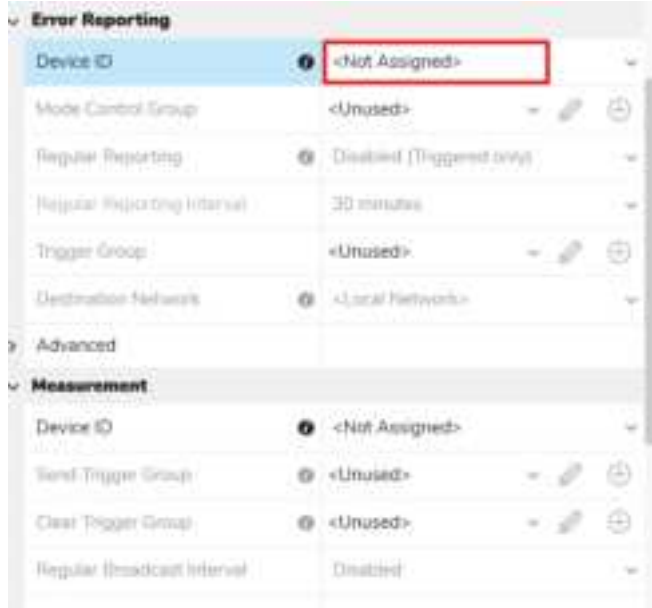
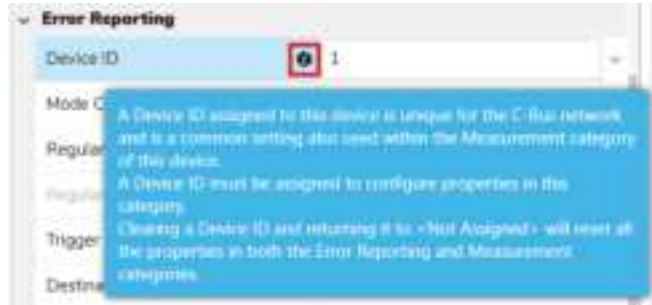
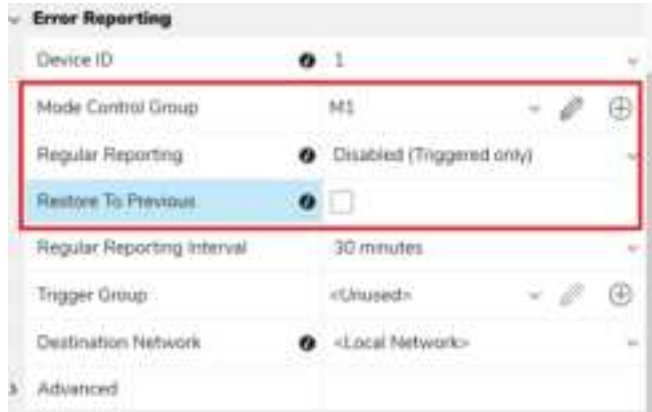
- RELDN4A - 5504RVF - 4 Channel, 16A DIN Rail Voltage Free Relay, Switchable C-Bus Power Supply
- RELDN8A - 5508RVF - 8 Channel, 16A DIN Rail Voltage Free Relay, Switchable C-Bus Power Supply
- RELDN16A - 5516RVF - 16 Channel, 16A DIN Rail Voltage Free Relay, Switchable C-Bus Power Supply

To enable/disable **Inbuilt C-Bus Power Supply** function for the Voltage Free Relays, [click here](#), page 218.

The field information to configure SpaceLogic C-Bus Relay is as explained below:

Applications	This section displays the lighting applications supported by the relays. Up to four lighting applications can be defined and then used throughout the configuration of the relays.	
Channels NOTE: • RELDN16A will have 16 channels • RELDN8A will have 8 channels • RELDN4A will have 4 channels	Group This field allows to program group addresses associated with relay channels. You can: • Select group address using drop-down list. • Modify group address using . • Add group address using . • Create a new group name which takes the next available address (it's a fast commissioning option).	
	Channel Name	This field allows to define the channel name of the relay.
	Channel Location	This field allows to define the channel location of the relay.
	Advanced	Turn on Threshold (C-Bus Level) The turn on threshold has a range of 0 – 255 which are C-Bus levels.
		Warn Before off Time This field allows to set the warn before off time. Warn Before off Time can be set between 1– 15 min. By default, it is Not Enabled . Once Warn Before off Time is set, Warn Before off Level field is displayed and enabled to set the range between 1–100 %.
		Power Recovery This field allows to set the power recovery percentage. By default, it is Restore To Previous .
		Restrike Delay This field defines a time between a channel switching off and switching on. Delay is set in minutes:seconds. This setting is also applicable for upon device power up. Mouse over on the Restrike Delay info icon to view the tooltip message.
	Logic	Type This field allows to select the type of the logic group.

			Logic Group This field allows to program logic group addresses associated with relay channels. You can: - Select group address using drop-down list. - Modify group address using . - Add group address using . - Have maximum 4 logic groups. Mouse over on the Logic info icon to view the tooltip message.
Interlock Channels The Relay interlock allows interlocking of multiple relay channels, so that only one relay in a group of interlocked relay is On at any one time.	Add Interlock Set NOTE: The maximum number of interlock sets added depends on the number of Channels assigned to the set. Example: Having 2 interlock sets added. If set 1 is assigned with 6 channels, then set 2 can be assigned with only the remaining 10 channels.	 to add new channel interlock set. Number of channels to interlock is maximum 16, minimum is 2. Each selected channels in a interlock set can be assigned with highest to lowest priority. NOTE: No Channel Interlock, when interlock channels are not added No Channels Interlocked is displayed.	
Interlock Sets Each created interlock sets has the mentioned fields Click  to remove an created interlock set.	Interlock Switching Delay (sec) Allows to set the seconds of delay for interlock switching between the range 0.1 to 10 sec. Mouse over on the Interlock Switching Delay (sec) info icon to view the tooltip message.		
	Number of channels to Interlock Select the number of channels to interlock (2, 3, 4).		
	High Priority Select the channel to set as an highest priority and allocate the percentage. Click  to remove the assigned priority.		
	Lowest Priority Select the channel to set as an lowest priority and allocate the percentage. Click  to remove the assigned priority.		
Remote On/Off	This field allows to choose the combinations of Remote On and Off for each individual channels. NOTE : - RELDN16A will have 16 channels - RELDN8A will have 8 channels - RELDN4A will have 4 channels		

Error Reporting This section display the fields for error reporting	Device ID	This field displays the unit address of the device. NOTE: The Device ID is for the entire device and is as same for Measurement section. When you assign a Device ID, and if you set the Device ID to Not Assigned, then all properties in both the Error Reporting and Measurement section are reverted to their default settings and disabled (grey out state).  Mouse over on the Device ID info icon to view the tooltip message. 
	Mode Control Group	This field allows to add an enable group (0–254). If you assign a group, Restore To Previous field is displayed and Regular Reporting Interval drop-down is enabled. If you uncheck the Restore To Previous check box, Regular Reporting field will be enabled. If you check Restore To Previous check box, Regular Reporting will be disabled. 
	Regular Reporting	This field configures the Error Reporting mode of the relays into one of the below modes:

		• Disabled (Triggered only): Errors are reported only when triggered by the assigned Trigger Group. • All Errors, most recent only (Mode 1): The most recent errors are reported automatically at a regular time interval (time set by the Regular Report Interval field). • All Errors, most recent and most severe (Mode 2): The most recent and most severe (or latched) errors are reported automatically at a regular time interval (time set by the Regular Report Interval field). • Minimum Errors, most recent only (Mode 3): The most recent minimum errors are reported automatically at a regular time interval (time set by the Regular Report Interval field). • Minimum Errors, most recent and most severe (Mode 4): The most recent and most severe minimum errors are reported automatically at a regular time interval (time set by the Regular Report Interval field). All the modes can be set with the regular reporting interval set to No regular reports, which allows live reporting of errors without the regular reports. Mouse over on the Regular Reporting info icon to view the tooltip message.		
	Restore to Previous	If selected, this field restores the data on power failure. When you click Save with the below conditions: • Mode Control Group — Assigned • Restore to Previous — Checked • Regular Reporting — Disabled state The Regular Reporting displays the last saved value. Mouse over on the Restore to Previous info icon to view the tooltip message. 		
	Regular Reporting Interval	This field is used to select the time interval period between the completion of a regular report and beginning of the next report in Always On, Most recent only and Always On, Most recent and most severe modes. By default, the interval is 30 minutes. Regular Reporting Interval is enabled for Trigger Only mode.		
	Trigger Group	This field contains a Trigger Group to trigger an error reporting event for any of the three error reporting modes. When a Trigger group is created, Resend Action Selector and Acknowledge Action selector fields are displayed. The Resend Action Selector is set to send all errors and Acknowledge Action selector is set to acknowledge all errors.		
	Destination Network	This field contains the destination C-Bus network to which the relays routes the error reporting messages. This allows the error messages to be sent to a remote C-Bus network for central monitoring if it's not the local network. Mouse over on the Destination Network info icon to view the tooltip message.		
	Advanced	<table><tr><td>C-Bus Voltage Warning Set Threshold</td><td> • By default, Disabled is selected. • The value selected must be less than the C-Bus Voltage Warning Clear Threshold value selected. </td></tr></table>	C-Bus Voltage Warning Set Threshold	• By default, Disabled is selected. • The value selected must be less than the C-Bus Voltage Warning Clear Threshold value selected.
C-Bus Voltage Warning Set Threshold	• By default, Disabled is selected. • The value selected must be less than the C-Bus Voltage Warning Clear Threshold value selected.			

			If the C-Bus Voltage Warning Clear Threshold is Disabled, then setting a value here will also set the C-Bus Voltage Warning Clear Threshold value to (current C-Bus Voltage Warning Set Threshold value + 1 V). Mouse over on the C-Bus Voltage Warning Set Threshold info icon to view the tooltip message.
		C-Bus Voltage Warning Clear Threshold	- By default, Disabled is selected - The value selected must be greater than the C-Bus Voltage Warning Set Threshold value selected. - If the C-Bus Voltage Warning Set Threshold is Disabled, then setting a value here will also set the C-Bus Voltage Warning Set Threshold value to (current C-Bus Voltage Warning Clear Threshold value - 1 V). Mouse over on the C-Bus Voltage Warning Clear Threshold info icon to view the tooltip message.
		C-Bus Voltage Critical Set Threshold	- By default, Disabled is selected - The value selected must be less than the C-Bus Voltage Critical Clear Threshold value selected. - If the C-Bus Voltage Critical Clear Threshold is Disabled, then setting a value here will also set the C-Bus Voltage Critical Clear Threshold value to (current C-Bus Voltage Critical Set Threshold value + 1 V). - If the C-Bus Voltage Warning Set Threshold has a value set (other than Disabled), then the value selected must be less than (current C-Bus Voltage Warning Set Threshold value). Mouse over on the C-Bus Voltage Critical Set Threshold info icon to view the tooltip message.
		C-Bus Voltage Critical Clear Threshold	- By default, Disabled is selected - The value selected must be greater than the C-Bus Voltage Critical Set Threshold value selected. - If the C-Bus Voltage Critical Set Threshold is Disabled, then setting a value here will also set the C-Bus Voltage Critical Set Threshold value to (current C-Bus Voltage Critical Clear Threshold value - 1 V). Mouse over on the C-Bus Voltage Critical Clear

			Threshold info icon to view the tooltip message.
		C-Bus Power Supply Warning Set Threshold	- By default, Disabled is selected. - The value selected must be greater than the C-Bus Power Supply Warning Clear Threshold value selected. - If the C-Bus Power Supply Warning Clear Threshold is Disabled, then setting a value here will also set the C-Bus Power Supply Warning Clear Threshold value to (current C-Bus Power Supply Warning Set Threshold value - 10 mA). Mouse over on the C-Bus Power Supply Warning Set Threshold info icon to view the tooltip message.
		C-Bus Power Supply Warning Clear Threshold	- By default, Disabled is selected. - The value selected must be less than the C-Bus Power Supply Warning Set Threshold value selected. - If the C-Bus Power Supply Warning Set Threshold is Disabled, then setting a value here will also set the C-Bus Power Supply Warning Set Threshold value to (current C-Bus Power Supply Warning Clear Threshold value + 10 mA). Mouse over on the C-Bus Power Supply Warning Clear Threshold info icon to view the tooltip message.
		Unit Over Temperature Set Threshold	This field is a combo box which is by default set to 70° C. The Unit Over Temperature Set Threshold property increments by 1° C with a range of 1° C - 80° C. Mouse over on the Unit Over Temperature Set Threshold info icon to view the tooltip message.
		Unit Over Temperature Clear Threshold	This field is a combo box which is by default set to 65° C. The Unit Over Temperature Clear Threshold property increments by 1° C with a range of 0° C - 79° C. Mouse over on the Unit Over Temperature Clear Threshold info icon to view the tooltip message.
Measurement	Device ID	This field displays the unit address of the device. NOTE: The Device ID is for the entire device and is as same for Error Reporting section. When you assign a Device ID, and if you set the Device ID to Not Assigned, then all properties in both the Error Reporting and Measurement section are reverted to their default settings and disabled (grey out state).	

	Send Trigger Group	This field contains a trigger group to request the relays to send its stored measurement data. Mouse over on the Send Trigger Group info icon to view the tooltip message.	
	Clear Trigger Group	This field contains a trigger group to clear the stored measurement data in the relays. Mouse over on the Clear Trigger Group info icon to view the tooltip message.	
	Regular Broadcast Interval	NA	Disabled by default. Can set the intervals between 1 min to 4 hours.
	Regular Broadcast Option	All	Enabled by default.
		Lamp Hours	Selected and disabled by default.
		Channel Temperature	Selected and disabled by default.
		Power Supply Current	Selected and disabled by default.
		C-Bus Voltage	Selected and disabled by default.
		Unit temperature	Selected and disabled by default.
	NOTE: Deselecting all will enable each of the individual check box options.		
	Destination Network	This field contains the destination C-Bus network to which the relays routes measurement application messages. Mouse over on the Destination Network info icon to view the tooltip message.	

The action selector for trigger groups is as explained below:	Virtual Channel Number	Property	Units	Reset	Notes
	0 – 15	Lamp Running Time	Hours	Yes	NA
	16 – 31	Channel Voltage	Volts	No	Units with power metering only
	32 – 47	Channel Current	Amperes	No	
	48 – 63	Channel Power	Watts	No	
	64 – 79	Channel Energy	Watt-hours	Yes	
	80 – 95	Channel Lifetime Energy	Watt-hours	No	
	128 – 143	Channel Temperature	Celsius	No	relays only
	252	C-Bus Power Supply Output Current	Amperes	No	NA
	253	C-Bus Voltage	Volts	No	NA
	254	Unit Temperature	Celsius	NA	NA

Measurement Application supports various operational parameters for triggered request.

Measurement Request Trigger Group defines the Trigger Group for the request. A trigger's Action Selector determines which measured parameter is requested.

NOTE: Action Selector 0xFF requests all measurements (in which they are sent 2 at a time with an interval of 2 seconds). Other Action Selector values can be used to request individual measured properties corresponding to the virtual channel number as per the above table.

The DEVICE ID for the Measurements is defined by the Device ID parameter, the same Device ID is used for Error Reporting. The Device ID will be unique per network to differentiate measurements from different devices. The devices monitoring the Measurement messages should keep track of the source network to differentiate if Device IDs are reused across multiple C-Bus networks.

If the Device ID parameter is left at its default value of 0xFF then the Unit Address is used as the Device ID in the Measurement Application messages, which ensures uniqueness. However, if the device is readdressed then any monitoring devices will also needs to be updated to match the new Device ID (It is recommended to leave the Device ID as the default value).

Logic Groups relays can have maximum 4 logic groups each group having respective channels (8 or 4)	Group This section will allow to create a enable group using  and modify existing group using  . By default, it is unused. If enable group is created, Restore To Previous is enabled.
	Power Recovery This field allows to set the power recovery percentage. By default, it is Restore to Previous .
	Channel NOTE : - RELDN16A will have 16 channels - RELDN8A will have 8 channels - RELDN4A will have 4 channels

Global This section displays the project properties set by the user at the time of creation of the project.	C-Bus Clock	If checked, allows you to enable the C-Bus clock for the relays.
	Disable Local Toggle	If checked, disables the local toggle.
	Disable Power Supply Toggle	If checked, disables the power supply toggle.
	Disable C-Bus Priority	If checked, disables the C-Bus priority.
	Disable Clock Generator Toggle	If checked, disables the clock generator toggle.

Unit Identification This section display the fields for identification of the unit.	Unit Type	This field contains the unit type and unit description of the device.
	Catalog Number	This field contains the catalog number related to the unit type.
	Firmware Version	This field shows the version number of the C-Bus interface firmware which exists on the physical network or which has been assigned to a logical representation of the unit in the database.
	Part Name	This field contains the part name which is stored in the unit hardware, which can be modified.
	Unit Address	This field displays the unit address assigned to the device.
	Serial Number	This field contains the serial number which exists on the physical network.
	Tag Name	This field contains the name that user can give to the logical representation of the unit. This name can be up to 32 characters long and is stored in the project database only.
	Notes	This field contains a location to add notes about the unit which is stored in the project database only.

Status The Status section contains information about the C-Bus network related functions located on the unit.	Device Status This section displays the details of hardware.	Hardware Version	This field displays the hardware version of the device.
		Firmware Version	This field displays the firmware version of the device.
		C-Bus Clock Active	This field indicates whether the C-Bus internal clock is currently enabled on the relays within the network.
		C-Bus Voltage (V)	This field displays the C-Bus voltage of the device.
		Inbuilt C-Bus Power Supply Active	This field displays whether the Inbuilt C-Bus Power Supply Active is On or Off.
		Power Supply Load	This field displays the load of the power supply (mA).
		Power Supply Output Voltage	This field displays the power supply output voltage (mV) of the device.
		Load Power	This field displays the load power (mW) of the device.

		Unit Temperature	This field displays the unit temperature (°C) of the device.
--	--	-------------------------	--

Once configuring relay is completed, click **Save** to save the changes.

Relay Conversion

If there are old relays existing in the project, the SpaceLogic C-Bus Commission allows the user to convert old relays to new relays.

Old Unit Type	New Unit Type
RELDN4	RELDN4A
RELDN8/RELDN8B	RELDN8A
RELDN12	RELDN16A

To convert:

1. Open the same project in commission software same as in Toolkit where the device (old relay) is added in network.
2. Select **C-Bus Devices** of the network.
The available devices in the project are displayed.
3. Select the device (old relay) that needs to be converted.



4. Right click on the **Relay > Convert Unit**.
Convert Unit confirmation box is displayed.



5. Click **OK**.
6. The old relay RELDN4 is converted to new relay RELDN4A.



IMPORTANT: When conversion is completed:

- The address of the relay remains the same.
- The unit type catalogue description and firmware details are updated.
- The firmware will have the latest version.
- The serial details needs to be updated manually in property window of the device.
- The configuration changes made in old relay reflects in the new relay as well.

Table below shows the list of properties that will be restored in the new relay.

List of properties that will be restored in the RELDN4A, RELDN8A and RELDN16A

Properties	Properties which are restored	Properties which are not restored
Project Name	Project name will be restored as in the old relay	Not Applicable
Applications	Applications will be restored as in the old relay	Not Applicable
Channel	◦ Group Address ◦ Turn on Threshold (C-Bus Level) ◦ Power Recovery ◦ Restrike Delay ◦ Interlock Channels	Not Applicable
Logic	◦ Logic Groups ◦ Assignment ◦ Min, Max	Area
	◦ Logic Recovery ◦ Logic group Restore level	Learn Mode
Power Recovery	Not Applicable	Enable Burden
Global	◦ Enable C-Bus Clock ◦ Enable Local Toggle ◦ Enable C-Bus Priority	
Unit Identification	◦ Unit Address ◦ Part Name ◦ Tag Name ◦ Notes	
The serial details needs to be updated manually in the property editor.		

Once the conversion is completed:

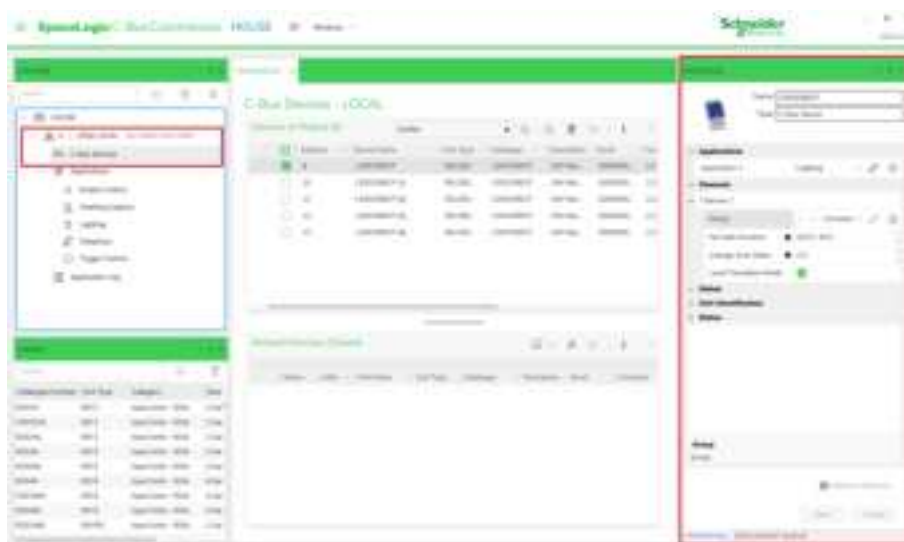
1. Scan the C-Bus network.
2. Identify new relay on the **Network**.
3. Readdress the device to match live network or readdress device to match the project database.
4. Deploy the device.

Shutter Relay

The Shutter Relay device is a C-Bus relay output unit for controlling motorised blinds, curtains, and window shutters. It also allows natural light to be incorporated into a lighting solution.

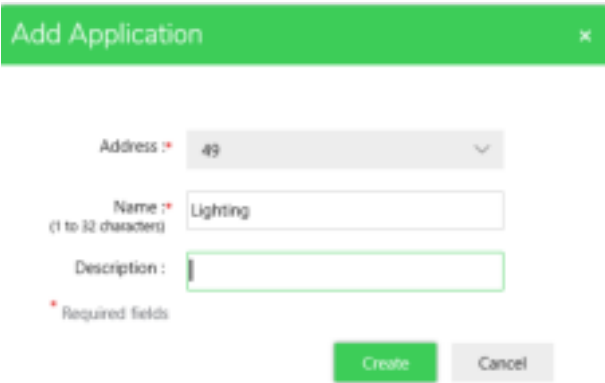
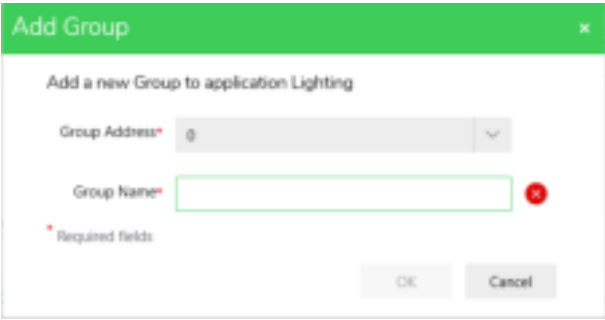
Prerequisites:

- A project must be open in the SpaceLogic C-Bus Commission software. The Shutter Relay device must already be added to a **Devices in Project** of a network (Adding Shutter Relay is similar to adding any C-Bus device).
 - This section displays the name and type of the Shutter Relay device. The name of the Shutter Relay device can be renamed and also allows the user to configure different operational features for Shutter Relay devices added to each network.
1. Select a Network from the project.
 2. Click **C-Bus Devices** of a network.
 3. Select Shutter Relay device from **Devices in Project**. The selected Shutter Relay device properties are displayed in the **PROPERTIES** window.



NOTE: The fields in the device properties can be modified as per the project requirement.

4. The field information to configure SpaceLogic C-Bus Shutter Relay is explained below:

Applications	This section displays the lighting applications supported by the Shutter Relays. Only one lighting application can be defined and then used throughout the configuration of the Shutter Relays. - Click . The Add Application pop-up appears.  The Add Application pop-up form contains the following fields: Address: A dropdown menu with the value 49. Name: A text input field containing "Lighting". Description: An empty text input field. At the bottom of the form are two buttons: Create and Cancel. - Enter the required details and then click Create. The application is created and listed in the Application 1 drop-down. - Click  to modify the application name.  The Edit Application pop-up form contains the following fields: Address: A dropdown menu with the value 49. Name: A text input field containing "Lighting". Description: An empty text input field. At the bottom of the form are two buttons: Save and Cancel. - Make necessary changes and then click Save.
Channels NOTE: RELDB1 will have 1 channel	Group This field allows to program group addresses associated with Shutter Relay channels. - You can select group address using drop-down. - Click  to add group address. The Add Group pop-up appears.  The Add Group pop-up form contains the following fields: Group Address: A dropdown menu with the value 0. Group Name: An empty text input field. At the bottom of the form are two buttons: OK and Cancel. - Enter the required details and then click OK. The group is created and listed in the Group drop-down.

	- Click  to modify group address. The Edit Group pop-up appears.  - Make necessary changes and then click OK. You can also create a new group name which takes the next available address (it's a fast commissioning option).	
	Fail Safe Duration	Select the time for fail safe duration from the drop-down.
	Change Over Delay	Select the time for minimum delay permitted between completing an open or close operation and commencing another.
	Level Translation Mode	If you uncheck the Level Translation Mode check box, a Confirmation pop-up appears.  Click Yes to disable level translation mode.

Global This section displays the project properties set by the user at the time of creation of the project.	Area	This field displays the area address, which is set to unused by default. You can use the Area drop-down to program the unit to be part of a specific area. - Click  to add group address. The Add Group pop-up appears. - Click  to modify group address. The Edit Group pop-up appears.	
	Unit Options	Enable C-Bus Clock	If checked, you can enable the C-Bus clock for the Shutter Relays.
		Enable Burden (Software)	You can enable/disable the Enable Burden check box only if the unit address is set to 1 and the Enable C-Bus Clock check box is selected.
		Enable Local Toggle	If checked, you can enable the local toggle for the Shutter Relays.
		Enable C-Bus Priority	If checked, you can enable the C-Bus priority for the Shutter Relays.
	Learn Mode	Allow Learn Mode	Select the Allow Learn Mode check box to enable the Application Learn drop-down.
		Application Learn	The Application Learn drop-down is enabled only if the Allow Learn Mode check box is selected.
		Unit Has Learned	This field displays Yes if the unit has been learned and No if the unit has not been learned.

Unit Identification This section display the fields for identification of the unit.	Unit Type	This field displays the unit type and unit description of the device.
	Catalog Number	This field displays the catalog number related to the unit type.
	Firmware Version	This field displays the version number of the C-Bus interface firmware which exists on the physical network

		or which has been assigned to a logical representation of the unit in the database.
	Part Name	This field displays the part name which is stored in the unit hardware, which can be modified.
	Unit Address	This field displays the unit address assigned to the device.
	Serial Number	This field contains the serial number which exists on the physical network.
	Tag Name	This field displays the name that you can provide to the logical representation of the unit. This name can be up to 32 characters long and is stored in the project database only.
	Notes	This field displays a location to add notes about the unit which is stored in the project database only.

Status The Status section contains information about the C-Bus network related functions located on the unit.	C-Bus Clock Active	This field displays whether the C-Bus internal clock is currently enabled on the Shutter Relays on the network.
	C-Bus Voltage (V)	This field displays the C-Bus voltage of the device.
	Learn Mode Active	This field displays the status of the learn mode.
	Burden (Software) Active	This field displays the status of the burden (software).
	Local Toggle Active	This field displays the status of the local toggle.

Once Shutter Relay configuration is completed, **Save** the changes.

Support Units

C-Bus units which provide support for the C-Bus network are generally known as support units. Some support units are responsible for linking a C-Bus network to another network or other system or protocol. They include bridges to connect C-Bus networks to one another, DALI gateways to connect to DALI networks, and interface units to connect to PCs, laptops as well as third party control devices. Other support units include: Telephony interfaces, IR transmitters, and C-Bus power supplies.

These units physically link a C-Bus network to another network or other system or protocol. They include C-Bus bridges, which link two wired networks, as well as wired to wireless gateways to connect to C-Bus wired networks.

- Bridges, page 239
- Gateways, page 240
- PC Interfaces, page 268

Bridges

The C-Bus bridges provide connectivity between wired C-Bus networks, see [Add bridge network](#)

There are two types of wired bridges:

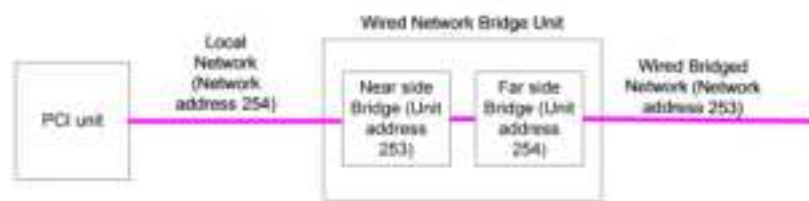
- C-Bus network bridge (5100B)
- C-Bus network bridge (5500NB)

Each of the bridge units have a near and far side, which relates to whether the side is connected to a local or remote network.

The local and wired bridged networks are linked together by a network bridge unit. When the wired bridged network is added, the network bridge appears as a unit in both the local and wired network. In the local network, the bridge is listed as Near side network bridge unit. In the wired bridged network, the bridge appears as Far side network bridge unit.

When the network bridge is configured, the Near side network bridge unit address has the same value as the far side network (Wired Bridged) address and the Far side network bridge unit has the same value as the near side network (Local) address

Local and Wired Bridged network joined by a single network bridge



List of Bridge unit devices:

- 5500NB [BRIDGE2F] and 5500NB [BRIDGE2N]
- 5100B [BRIDGE1F] and 5100B [BRIDGE1N]
- SLC5500NB [BRIDGE2F] and SLC5500NB [BRIDGE2N]

The C-Bus bridge configuration provides the ability to view unit identification and unit status information as well as configure global settings.

Field		Description
Connection	Links to Network	Displays the network it is linked with in the far side of the bridge.

	Route C-Bus Applications to This section allows to select, whether they want to send the C-Bus message to Adjacent or Remote network by checking the check box. NOTE: Remote network check box will not be enabled unless there is a remote network to route to.	Displays whether the network is adjacent or remote Remote network will be enabled when more than 1 network is linked .
	C-Bus Application Policy Rule This section allows to control the messages which are passed between the wireless to the wired network by defining at least one of the two drop down lists.	Policy Rule 1 Policy Rule 1 drop down list allows to select all or specifically only one application. If All Applications is selected, messages for all applications will be passed between the networks. Policy Rule 2 If you select only one application type, the Policy Rule 2 drop down list, will offer a secondary choice of application type.
Global This section allows users to check and update the C-Bus clock information.	C-Bus Clock	The C-Bus Clock check box enables/disables the resident C-Bus clock. The Enable C-Bus Clock check box is ticked (enabled) by default.
	Burden	The Enable Burden check box enables/disables the resident network burden. The Enable Burden check box is operational if the unit address is 001 and the Enable C-Bus Clock check box is ticked. Otherwise, the Enable Burden check box is non-operational [greyed out]. If the operational Enable Burden check box is ticked, then the resident burden is enabled.
Unit Identification This section display the fields for identification of the unit.	Unit Type	The Unit Type field contains the unit type and unit description of the device.
	Firmware Version	The Firmware Version field shows the version number of the C-Bus interface firmware which exists on the physical network or which has been assigned to a logical representation of the unit in the database.
	Catalogue Number	The Catalog Number field contains the catalog number related to the unit type.
	Part Name	The Part Name field contains the part name which is stored in the unit hardware.
	Unit Address	This field displays the unit address assigned to the device.
	Serial Number	The Serial number field contains the serial number which exists on the physical network.
	Tag Name	The Tag Name field contains the name that user can give to the logical representation of the unit. This name can be up to 32 characters long and is stored in the project database only.
Status The Status section contains information about the C-Bus network related functions located on the unit.	C-Bus Clock Active	The Clock Active indicates whether the C-Bus internal clock is enabled on this C-Bus unit. If activated, the indicator is lit. If not activated, the indicator is greyed out.
	Burden Active	The Burden Active indicates whether the C-Bus burden is active on this C-Bus unit. If active, the indicator is lit. If not active, the indicator is greyed out.
	Voltage	Voltage field contains the voltage level available to the unit. The voltage level displayed refreshes whenever the Update Status button is clicked.

Gateways

The available Gateway devices are visible in **Library** window, select  > **Support units > Gateways**

C-Bus DALI-2 Gateway

The SpaceLogic C-Bus DALI-2 Gateway is an interface that allows controlling, managing and monitoring of DALI Lighting and Emergency Lighting devices. It allows to configure and commission DALI Lighting and Emergency Lighting devices in conjunction with C-Bus units.

Unit Type

SYS_DAL2 (5502CDGP230)

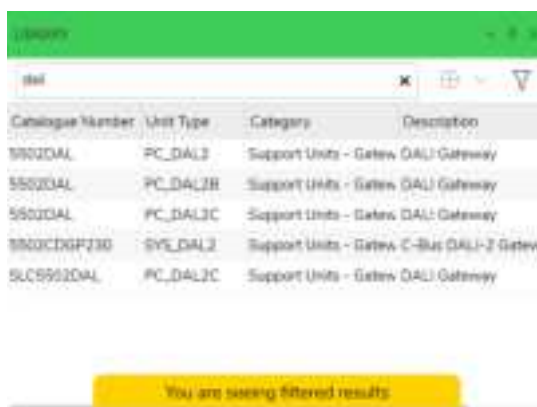
DALI-2 gateway:

- Is a DALI-2 certified multi-master application controller
- Supports full functionality of DALI device types DT0, DT1, DT6
- Enables comprehensive reporting on DALI devices and lines status and failures over C-Bus reporting feature
- Warn before off functionality indicates the lights are about to turn off by visual warning
- Allows switching, dimming for individual devices, groups, and broadcast addressing modes and flexible scene triggering via DALI group and broadcast addressing
- Provides 2-way mapping between DALI and C-Bus

Add DALI-2 Gateway

Prerequisites: Make sure your project is Open, and network has been selected.

1. Select the *Network*.
2. Click *C-Bus Devices*.
3. Type "Dali" in **Library** window *Search* bar.

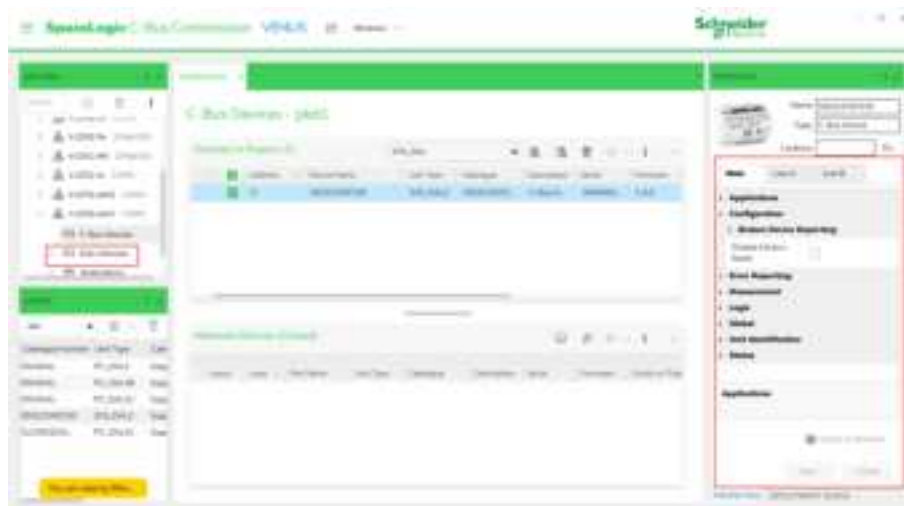


Step result: All the Dali gateways are displayed.

4. Select DALI-2 gateway (SYS_DAL2) and click 

Step result: DALI-2 gateway is added to the *Devices in Project* section

5. Once DALI-2 gateway is added to the *Devices in Project* section, Dali devices is displayed in **Library** window and gateway properties is displayed in **Property** window.



Make sure **Properties** window has been selected in the **Windows** ▾

NOTE: Adding multiple DALI-2 Gateway is similar to ADD Multiple C-Bus devices, page 68

To configure DALI 2 Gateway, click here, page 242

DALI-2 Gateway

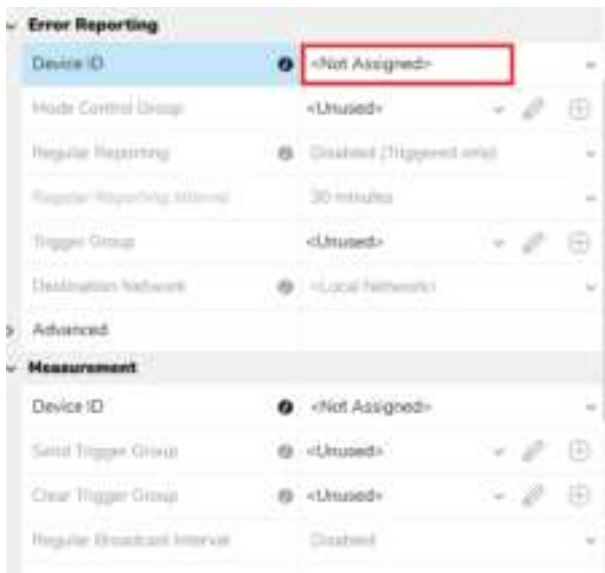
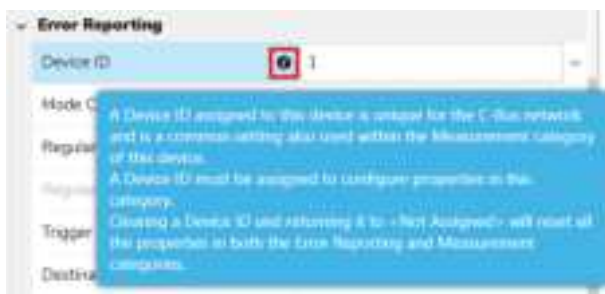
Prerequisites: Make sure the network is already been created in a project and DALI-2 gateway is been added to **Devices in Project** (project database).

Unit Type

SYS_DAL2 (5502CDGP230)

The table below explains the field information in the property editor required to configure the DALI-2 gateway device.

Applications	
This section displays the lighting applications supported by the DALI-2 gateway. Up to four lighting applications can be defined and then used throughout the configuration of the DALI-2 gateway for control across C-Bus Main, Line A and Line B.	
Main	
Configuration	Broken Device Reporting
This section has a configuration field to set the operation conditions for C-Bus DALI-2 gateway.	This section displays the different failure modes. If a failure mode check box is selected, the C-Bus DALI-2 gateway will report that failure mode. • Control Gear Failure: This check box refers to the failure of control gear in the gateway. If selected, the C-Bus DALI-2 gateway will report the Control Gear Failure mode. • Lamp Failure: This check box refers to the failure of lamp in the gateway. If selected, the C-Bus DALI-2 gateway will report the Lamp Failure mode. • Emergency Control Gear Failure: This check box refers to the failure of circuit in the gateway. If selected, the C-Bus DALI-2 gateway will report the Circuit Failure mode. • Battery Duration Failure: This check box refers to the failure of battery duration in the gateway. If selected, the C-Bus DALI-2 gateway will report the Battery Duration Failure mode. • Battery Failure: This check box refers to the failure of battery in the gateway. If selected, the C-Bus DALI-2 gateway will report the Battery Failure mode. • Emergency Lamp Failure: This check box refers to the failure of DALI emergency and exit ECGs in the gateway. If selected, the C-Bus DALI-2 gateway will report the Emergency Lamp Failure mode. • Function Test Max Delay Exceeded: • Function Test Failed: This check box refers to the failure of function test in the gateway. If selected, the C-Bus DALI-2 gateway will report the Function Test Failure mode. • Duration Test Failed:

	• Open Circuit: This check box refers to the open circuit in the gateway. If selected, the C-Bus DALI-2 gateway will report the Open Circuit mode. • Short Circuit: This check box refers to the short circuit in the gateway. If selected, the C-Bus DALI-2 gateway will report the Short Circuit error reported by the DALI ECGs. • Load Decrease: This check box refers to the load decrease in the gateway. If selected, the C-Bus DALI-2 gateway will report the Load Decrease error reported by the DALI ECGs. • Load Increase: This check box refers to the load increase in the gateway. If selected, the C-Bus DALI-2 gateway will report the Load Increase error reported by the DALI ECGs. • Current Protector Active: This check box refers to the current protector active in the gateway. If selected, the C-Bus DALI-2 gateway will report the Current Protector Active error reported by the DALI ECGs. • Thermal Shutdown: This check box refers to the thermal shutdown in the gateway. If selected, the C-Bus DALI-2 gateway will report the Thermal Shutdown error reported by the DALI ECGs. • Thermal Overload: This check box refers to the thermal overload in the gateway. If selected, the C-Bus DALI-2 Gateway will report the Thermal Overload error reported by the DALI ECGs. • Reference Measurement Failed: If this check box is selected, the C-Bus DALI-2 gateway will report the Reference Measurement Failure mode.
	Disable Factory Reset If this check box is selected, the C-Bus DALI-2 gateway will disable the factory reset.
Error Reporting This section displays the fields for error reporting.	Device ID This field displays the unit address of the device. When you assign a Device ID, and then if you set the Device ID to Not Assigned, then all properties in both the Error Reporting and Measurement section are reverted to their default settings and disabled (grey out state).  Mouse over on the Device ID info icon to view the tooltip message. 
	Mode Control Group This field allows to add an enable group (0–254). If you assign a group, Restore To Previous field is displayed and Regular Reporting Interval drop-down is enabled. If you uncheck the Restore To Previous check box, Regular Reporting field will be enabled. If you check Restore To Previous check box, Regular Reporting will be disabled.

		
Regular Reporting		This field configures the regular reporting mode of the DALI-2 gateway into one of the below modes: • Disabled (Triggered only): Errors are reported only when triggered by the assigned Trigger Group. • All Errors, most recent only (Mode 1): The most recent errors are reported automatically at a regular time interval (time set by the Regular Report Interval field). • All Errors, most recent and most severe (Mode 2): The most recent and most severe (or latched) errors are reported automatically at a regular time interval (time set by the Regular Report Interval field). • Minimum Errors, most recent only (Mode 3): The most recent minimum errors are reported automatically at a regular time interval (time set by the Regular Report Interval field). • Minimum Errors, most recent and most severe (Mode 4): The most recent and most severe minimum errors are reported automatically at a regular time interval (time set by the Regular Report Interval field). All the modes can be set with the regular reporting interval set to No regular reports, which allows live reporting of errors without the regular reports. Mouse over on the Regular Reporting info icon to view the tooltip message.
Restore To Previous		When you click Save with the below conditions: • Mode Control Group — Assigned • Restore to Previous — Checked • Regular Reporting — Disabled state The Regular Reporting displays the last saved value. Mouse over on the Restore to Previous info icon to view the tooltip message. 
Regular Report Interval		This field is used to select the time interval period between the completion of a regular report and beginning of the next report in All Errors, most recent only and All Errors, most recent and most severe modes. By default, the interval is 30 minutes. Regular reporting interval is enabled for Trigger Only mode.
Trigger Group		This field contains a Trigger Group to trigger an error reporting event for any of the three error reporting modes. When a trigger group is created, Resend Action Selector and Acknowledge All Action selector fields are displayed. The Resend Action Selector is set to send all errors and Acknowledge All Action selector is set to acknowledge all errors.
Destination Network		This field contains the destination C-Bus network to which the DALI-2 gateway routes the error messages. This allows the

		error messages to be sent to a remote C-Bus network for central monitoring if it's not the local network. Mouse over on the Destination Network info icon to view the tooltip message.	
	Advanced	C-Bus Voltage Warning Set Threshold	- By default, Disabled is selected. - The value selected must be less than the C-Bus Voltage Warning Clear Threshold value selected. - If the Line A Over Temperature Clear Threshold is Disabled, then setting a value here will also set the Line A Over Temperature Clear Threshold value to (Line A Over Temperature Set Threshold - 1 °C). Mouse over on the C-Bus Voltage Warning Set Threshold info icon to view the tooltip message.
		C-Bus Voltage Warning Clear Threshold	- By default, Disabled is selected. - The value selected must be greater than the C-Bus Voltage Warning Set Threshold value selected. - If the C-Bus Voltage Warning Set Threshold is Disabled, then setting a value here will also set the C-Bus Voltage Warning Set Threshold value to (current C-Bus Voltage Warning Clear Threshold value - 1 V). Mouse over on the C-Bus Voltage Warning Clear Threshold info icon to view the tooltip message.
		C-Bus Voltage Critical Set Threshold	- By default, Disabled is selected. - The value selected must be less than the C-Bus Voltage Critical Clear Threshold value selected. - If the C-Bus Voltage Critical Clear Threshold is Disabled, then setting a value here will also set the C-Bus Voltage Critical Clear Threshold value to (current C-Bus Voltage Critical Set Threshold value + 1 V). - If the C-Bus Voltage Warning Set Threshold has a value set (other than Disabled), then the value selected must be less than (current C-Bus Voltage Warning Set Threshold value). Mouse over on the C-Bus Voltage Critical Set Threshold info icon to view the tooltip message.

		C-Bus Voltage Critical Clear Threshold	- By default, Disabled is selected. - The value selected must be greater than the C-Bus Voltage Critical Set Threshold value selected. - If the C-Bus Voltage Critical Set Threshold is Disabled, then setting a value here will also set the C-Bus Voltage Critical Set Threshold value to (current C-Bus Voltage Critical Clear Threshold value - 1 V). Mouse over on the C-Bus Voltage Critical Clear Threshold info icon to view the tooltip message.
		C-Bus Power Supply Warning Set Threshold	- By default, Disabled is selected. - The value selected must be greater than the C-Bus Power Supply Warning Clear Threshold value selected. - If the C-Bus Power Supply Warning Clear Threshold is Disabled, then setting a value here will also set the C-Bus Power Supply Warning Clear Threshold value to (current C-Bus Power Supply Warning Set Threshold value - 10 mA). Mouse over on the C-Bus Power Supply Warning Set Threshold info icon to view the tooltip message.
		C-Bus Power Supply Warning Clear Threshold	- By default, Disabled is selected. - The value selected must be less than the C-Bus Power Supply Warning Set Threshold value selected. - If the C-Bus Power Supply Warning Set Threshold is Disabled, then setting a value here will also set the C-Bus Power Supply Warning Set Threshold value to (current C-Bus Power Supply Warning Clear Threshold value + 10 mA). Mouse over on the C-Bus Power Supply Warning Clear Threshold info icon to view the tooltip message.
		Unit Over Temperature Set Threshold	This field is a combo box which is by default set to 70 °C. The Unit Over Temperature Set Threshold property increments by 1 °C with a range of 1 °C - 80 °C. Mouse over on the Unit Over Temperature Set Threshold

			info icon to view the tooltip message.
		Unit Over Temperature Clear Threshold	This field is a combo box which is by default set to 65° C. The Unit Over Temperature Clear Threshold property increments by 1° C with a range of 0° C - 79° C. Mouse over on the Unit Over Temperature Clear Threshold info icon to view the tooltip message.
		Line A Over Temperature Set Threshold	- By default, Disabled is selected. - The value selected must be greater than the Line A Over Temperature Set Threshold value selected. - If the C-Bus Power Supply Warning Set Threshold is Disabled, then setting a value here will also set the C-Bus Power Supply Warning Set Threshold value to (current C-Bus Power Supply Warning Clear Threshold value + 10 mA). Mouse over on the Line A Over Temperature Set Threshold info icon to view the tooltip message.
		Line A Over Temperature Clear Threshold	- By default, Disabled is selected. - The value selected must be less than the Line A Over Temperature Set Threshold value selected. - If the Line A Over Temperature Set Threshold is Disabled, then setting a value here will also set the Line A Over Temperature Set Threshold value to (Line A Over Temperature Clear Threshold value + 1 °C). Mouse over on the Line A Over Temperature Clear Threshold info icon to view the tooltip message.
		Line B Over Temperature Set Threshold	- By default, Disabled is selected. - The value selected must be greater than the Line B Over Temperature Set Threshold value selected. - If the Line B Over Temperature Clear Threshold is Disabled, then setting a value here will also set the Line B Over Temperature Clear Threshold value to (Line B Over Temperature Set Threshold - 1 °C).

			Mouse over on the Line B Over Temperature Set Threshold info icon to view the tooltip message.	
		Line B Over Temperature Clear Threshold	- By default, Disabled is selected. - The value selected must be less than the Line B Over Temperature Set Threshold value selected. - If the Line B Over Temperature Set Threshold is Disabled, then setting a value here will also set the Line B Over Temperature Set Threshold value to (Line B Over Temperature Clear Threshold value + 1 °C). Mouse over on the Line B Over Temperature Clear Threshold info icon to view the tooltip message.	
Measurement The DALI-2 Gateway monitors a range of properties such as DALI device lamp running time, line voltage and line current for each DALI line. This information can then be shared on C-Bus using the measurement application.	Device ID	This field displays the unit address of the device. When you assign a Device ID, and then if you set the Device ID to Not Assigned , then all properties in both the Error Reporting and Measurement section are reverted to their default settings and disabled (grey out state). Mouse over on the Device ID info icon to view the tooltip message.		
	Send Trigger Group	This field contains a trigger group to request the DALI-2 gateway to send its stored measurement data. Mouse over on the Send Trigger Group info icon to view the tooltip message.		
	Clear Trigger Group	This field contains a trigger group to clear the stored measurement data in the DALI- 2 gateway. Mouse over on the Clear Trigger Group info icon to view the tooltip message.		
	Regular Broadcast Interval	Disabled by default. Can set the intervals between 1 min to 4 hours.		
	Regular Broadcast Option	All	Enabled by default.	
		Lamp Hours	Selected and disabled by default.	
		DALI MAC Temperature	Selected and disabled by default.	
		DALI Current	Selected and disabled by default.	
		DALI Voltage	Selected and disabled by default.	
		C-Bus Voltage	Selected and disabled by default.	
Unit temperature		Selected and disabled by default.		
		NOTE: Deselecting All check box will enable each of the individual check box options.		
Destination Network	This field contains the destination C-Bus network to which the DALI-2 gateway routes the measurement application messages. Mouse over on the Destination Network info icon to view the tooltip message.			
Each Device ID assigned has Send Trigger group associated with an Action Selector as described in the below table.				

Action Selector	Property	Units	Reset-table	Notes
0–63	Lamp Running Time (Line A)	Hours	Yes	Indexed By Object ID
64–127	Lamp Running Time (Line B)	Hours	Yes	Indexed by Object ID
128	Line A DALI Voltage	Volts	No	
129	Line B DALI Voltage	Volts	No	
130	Line A DALI Current	Amperes	No	
131	Line B DALI Current	Amperes	No	
132	Line A DALI MAC Temperature	Degrees C	No	
133	Line B DALI MAC Temperature	Degrees C	No	
253	C-Bus Voltage	Volts	No	
254	Unit Temperature	Degrees C	No	
Logic The DALI-2 Gateway can utilize combinational logic to control lighting behavior for DALI Line broadcast, DALI group or DALI device control. Up to 16 logic groups can be used for a DALI-2 Gateway.	Logic Groups			This section allows users to configure a C-Bus group from a lighting application for each of the 16 available logic groups.
Global This section displays the project properties set by the user at the time of creation of the project.	C-Bus Clock			This section allows users to enable or disable the C-Bus clock for the DALI-2 gateway.
Unit Identification This section displays the fields for identification of the unit.	Unit Type			Displays the unit type and unit description of the device.
	Catalogue Number			Displays the catalog number related to the unit type.
	Firmware Version			Displays the version number of the C-Bus interface firmware which exists on the physical network or which has been assigned to a logical representation of the unit in the database.
	Part Name			Displays the part name which is stored in the unit hardware, which can be modified.
	Unit Address			Displays the unit address assigned to the device.
	Serial Number			Displays the serial number which exists on the physical network.
	Tag Name			Displays the name that user can give to the logical representation of the unit. This name can be up to 32 characters long and is stored in the project database only.
	Notes			A location to add notes about the unit which is stored in the project database only.

Status The Status section contains information about the C-Bus network related functions located on the unit.	Voltage	Displays the voltage level available to the unit. The voltage level displayed refreshes whenever the Update Status button is clicked.
	C-Bus Clock-Active	This field indicates whether the C-Bus internal clock is currently enabled on the DALI-2 gateway within the network.

Line A / Line B	
Line A / Line B name	This field allows to rename Line A / Line B.
Warn Before Off Enable Group	This field allows to create a group to enable application.
WBO Restore	This field allows to set the Warn Before Off Restore by selecting the check box. If unchecked, can set the Warn Before Off restore level to Use off level , Use minimum level , or between 1–100%.
Enable Local Toggle	This field allows to set the Enable Local Toggle by selecting the check box.
Enable Commissioning	This field allows to set the Enable Commissioning by selecting the check box.
Enable C-Bus Priority	This field allows to set the Enable C-Bus Priority by selecting the check box.
Missing Device Threshold	This field allows to set the missing device range from 1–255.
Status Update Interval (Secs)	This field displays the status update interval ranging from 2–255.

Groups	Broadcast Groups	Brightness Group C-Bus group address is mapped to control the Broadcast Group, DALI Group 1 - 16 or Virtual Group 1 - 16. IMPORTANT: The groups assigned in Line A, Line B, and DALI devices on each line has to be unique. Only when you assign a group address for Brightness Group, CCT/Hue Group and Saturation Group drop-downs are displayed.  - You can add group name for brightness group. Select the group name from the Brightness Group drop-down. - Click  to create new group name. Add Group pop-up is displayed.  - Provide the details and click OK. The created group name will be populated in the Brightness Group drop-down. - Click  to modify the group name. Edit Group pop-up is displayed. - Edit the group name and click OK.	CCT/Hue Group C-Bus group address is used to control the CCT/Hue of a DALI DT8 device. - If a Saturation Group is not set, this CCT/Hue Group controls the CCT (correlated colour temperature). Used in conjunction with the Brightness Group for on, off, and dimming control plus setting the white colour temperature (tuneable white). - If a Saturation Group is set, this CCT/Hue Group controls the Hue of a DALI DT8 device. NOTE: - The CCT/Hue Group uses the Application Index defined in the Brightness Group. - The CCT/Hue Group is applicable to all controllable DALI devices (excluding Types C and D), yet functional for DALI DT8 device only. To assign a group: - Select the group name from the CCT/Hue Group drop-down. - Click  to create new group name. Add Group pop-up is displayed. - Provide the details and click OK. The created group name will be populated in the CCT/Hue Group drop-down. - Click  to modify the group name. Edit Group pop-up is displayed. - Edit the group name and click OK. Group name is updated. Mouse over on the CCT/Hue Group info icon to view the tooltip message.	Saturation Group Only when you assign a group address for Saturation Group, RGB Mode field is displayed.  C-Bus Group Address is used to control the Saturation of a DALI DT8 device. - If a CCT/Hue Group is set, this CCT/Hue Group controls the Hue (colour) of a DALI DT8 device. The Saturation Group controls the Saturation (intensity) of a DALI DT8 device. - Used with both the Brightness Group and the CCT/Hue Group for on, off, and dimming control plus setting the RGB/RGBW colour and its intensity. NOTE: - The Saturation Group uses the Application Index defined in the Brightness Group. - The CCT/Hue Group is applicable to all controllable DALI devices (excluding Types C and D), yet functional for DALI DT8 device only. To assign a group: - Select the group name from the Saturation Group drop-down. - Click  to create new group name. Add Group pop-up is displayed.
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				- Provide the details and click OK. The created group name will be populated in the Saturation Group drop-down. - Click  to modify the group name. Edit Group pop-up is displayed. - Edit the group name and click OK. Group name is updated. Mouse over on the Saturation Group info icon to view the tooltip message.
				RGB Mode RGB Mode field will appear for all types excluding type C and D devices. You can configure the control of DALI coloured lighting solution to suit either 3-channel or 4-channel types to achieve the optimal outcome for coloured DALI lighting. Select the RGB mode.  Mouse over on the RGB Mode info icon to view the tooltip message.
		Application Index	This field is a combo box to select the application to be used for the group. The index is visible only when the application is been assigned in the application section.	
		Warn Before off Time	When enabled, it adds a time delay between when the C-Bus group is turned off and when the DALI lights actually go off. For example, if the Warn Before Off Time is set to 5 minutes for DALI Group 1, and the C-Bus group linked to it is turned off (such as when a sensor times out), the lights in DALI Group 1 will stay on for another 5 minutes before turning off. This feature is useful for alerting occupants that the lights will soon turn off due to lack of movement. To keep the lights on, they simply need to move to re-trigger the sensor, which will turn the C-Bus group back on and cancel the countdown. This field displays amount of time after the group address is turned off. When you select the minutes from the Warn Before off Time drop-down, Warn Before Off Level drop-down is displayed.	
		Warn Before Off Level	Select the Warn Before Off Level. When Warn Before Off is enabled for a channel, and a command is received from C-Bus to turn the channel OFF, the channel does not immediately turn off. Instead it: - sets the channel level to the configured Warn Before Off Level, to warn any occupants that the light will turn off shortly. - starts a countdown timer set for the Warn Before Off Time: - When the timer expires, the channel turns OFF. - If another OFF command is received for the channel before the timer expires, the channel cancels the timer and turns off immediately.	
		Advanced	Min / Max Logic	This field allows you to choose minimum or maximum level of the group address associated with the channel.
			Logic Group Assignment	This field allows to pair additional groups to the output, can have maximum 2 logic group assignment.
			Primary Control Function	The Primary Control Function setting determines how DALI lighting behaves when a C-Bus Group on is turned ON or OFF. It allows the lights to fade up or down smoothly, rather than switching instantly. These settings set the DALI fade times used when an instant ramp on C-Bus is received. The fades for target levels of

				OFF and ON affect toggle type functions, allowing adjustment of the soft turn off/on. The fades for other levels affect things like the ON event for a Memory Toggle function, the release event of pushbutton dimming, or the smoothness of light level maintenance. Two presets are available such as Push Button Dimming and Scene Operations. Select the required preset value. Mouse over on the Primary Control Function info icon to view the tooltip message. Recommended Fade Settings: <table><tr><th>Pri- mary Con- trol Func- tion</th><th>Soft Turn On</th><th>Soft Turn Off</th><th>Soft End Ramp</th></tr><tr><td>Push- button Dim- ming</td><td>0.7s</td><td>0.7s</td><td>2s</td></tr><tr><td>Scene Opera- tions</td><td>0.7s</td><td>0.7s</td><td>0.7s</td></tr><tr><td>Motion Sensor</td><td>0s</td><td>0.7s</td><td>2s</td></tr><tr><td>Day- light Har- vesting</td><td>0.7s</td><td>0.7s</td><td>4s</td></tr><tr><td>Cus- tom</td><td colspan="3">Choose your own values.</td></tr></table>	Pri- mary Con- trol Func- tion	Soft Turn On	Soft Turn Off	Soft End Ramp	Push- button Dim- ming	0.7s	0.7s	2s	Scene Opera- tions	0.7s	0.7s	0.7s	Motion Sensor	0s	0.7s	2s	Day- light Har- vesting	0.7s	0.7s	4s	Cus- tom	Choose your own values.		
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			Soft Turn On	Select the DALI fade time when an instant ramp is received with a target level of 100 %, so the group is turned ON at maximum level. If you select Instant from Soft Turn On drop-down, automatically Push Button Dimming is populated in the Primary Control Function drop-down. NOTE: When you trigger a light switch (On, Off, Toggle), you may need gentle fade such as , 0.7s or 1s. But if triggered by a motion sensor, a fast fade (0 s) might be better for instant response.																								
			Soft Turn Off	Select the DALI fade time when an instant ramp is received with a target level of zero, so the group is turned OFF. If you select Instant from Soft Turn Off drop-down, automatically Push Button Dimming is populated in the Primary Control Function drop-down.																								
			Soft End Ramp	Select the DALI fade time when an instant ramp is received with a target level of any value other than 0 to 100 %. NOTE: When using: Push Button Dimming key Function: A medium fade 2s is recommended to reduce any visible brightness correction.																								

				• Daylight Harvesting: A longer fade 4s is desirable to avoid the appearance of the artificial light level if the ambient light level changes frequently due to cloud cover.
	DALI Groups This section is to use the DALI Group.	Brightness Group C-Bus group address is mapped to control the Broadcast Group, DALI Group 1 - 16 or Virtual Group 1 - 16. IMPORTANT: The groups assigned in Line A, Line B, and DALI devices on each line has to be unique. Only when you assign a group address for Brightness Group, CCT/Hue Group and Saturation Group drop-downs are displayed. 	CCT/Hue Group C-Bus group address is used to control the CCT/Hue of a DALI DT8 device. • If a Saturation Group is not set, this CCT/Hue Group controls the CCT (correlated colour temperature). Used in conjunction with the Brightness Group for on, off, and dimming control plus setting the white colour temperature (tuneable white). • If a Saturation Group is set, this CCT/Hue Group controls the Hue of a DALI DT8 device. NOTE: • The CCT/Hue Group uses the Application Index defined in the Brightness Group. • The CCT/Hue Group is applicable to all controllable DALI devices (excluding Types C and D), yet functional for DALI DT8 device only. To assign a group: • Select the group name from the CCT/Hue Group drop-down. • Click  to create new group name. Add Group pop-up is displayed. • Provide the details and click OK. The created group name will be populated in the CCT/Hue Group drop-down. • Click  to modify the group name. Edit Group pop-up is displayed. • Edit the group name and click OK. Group name is updated. Mouse over on the CCT/Hue Group info icon to view the tooltip message.	• Daylight Harvesting: A longer fade 4s is desirable to avoid the appearance of the artificial light level if the ambient light level changes frequently due to cloud cover.
		Saturation Group Only when you assign a group address for Saturation Group, RGB Mode field is displayed. 	C-Bus Group Address is used to control the Saturation of a DALI DT8 device. • If a CCT/Hue Group is set, this CCT/Hue Group controls the Hue (colour) of a DALI DT8 device. The Saturation Group controls the Saturation (intensity) of a DALI DT8 device. • Used with both the Brightness Group and the CCT/Hue Group for on, off, and dimming control plus setting the RGB/RGBW colour and its intensity. NOTE: • The Saturation Group uses the Application Index defined in the Brightness Group. • The CCT/Hue Group is applicable to all controllable DALI devices (excluding Types C and D), yet functional for DALI DT8 device only. To assign a group:	

				- Select the group name from the Saturation Group drop-down. - Click  to create new group name. Add Group pop-up is displayed. - Provide the details and click OK. The created group name will be populated in the Saturation Group drop-down. - Click  to modify the group name. Edit Group pop-up is displayed. - Edit the group name and click OK. Group name is updated. Mouse over on the Saturation Group info icon to view the tooltip message.
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		Warn Before Off Level	Select the Warn Before Off Level. When Warn Before Off is enabled for a channel, and a command is received from C-Bus to turn the channel OFF, the channel does not immediately turn off. Instead it: - sets the channel level to the configured Warn Before Off Level, to warn any occupants that the light will turn off shortly. - starts a countdown timer set for the Warn Before Off Time: - When the timer expires, the channel turns OFF. - If another OFF command is received for the channel before the timer expires, the channel cancels the timer and turns off immediately.	
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	Virtual Groups This section refers to a category for virtual groups.	Brightness Group C-Bus group address is mapped to control the Broadcast Group, DALI Group 1 - 16 or Virtual Group 1 - 16. IMPORTANT: The groups assigned in Line A, Line B, and DALI devices on each line has to be unique. Only when you assign a group address for Brightness Group, CCT/Hue Group and Saturation Group drop-downs are displayed. 	CCT/Hue Group C-Bus group address is used to control the CCT/Hue of a DALI DT8 device. • If a Saturation Group is not set, this CCT/Hue Group controls the CCT (correlated colour temperature). Used in conjunction with the Brightness Group for on, off, and dimming control plus setting the white colour temperature (tuneable white). • If a Saturation Group is set, this CCT/Hue Group controls the Hue of a DALI DT8 device. NOTE: • The CCT/Hue Group uses the Application Index defined in the Brightness Group. • The CCT/Hue Group is applicable to all controllable DALI devices (excluding Types C and D), yet functional for DALI DT8 device only. To assign a group: • Select the group name from the CCT/Hue Group drop-down. • Click  to create new group name. Add Group pop-up is displayed. • Provide the details and click OK. The created group name will be populated in the CCT/Hue Group drop-down. • Click  to modify the group name. Edit Group pop-up is displayed. • Edit the group name and click OK. Group name is updated. Mouse over on the CCT/Hue Group info icon to view the tooltip message.	Saturation Group Only when you assign a group address for Saturation Group, RGB Mode field is displayed.  C-Bus Group Address is used to control the Saturation of a DALI DT8 device. • If a CCT/Hue Group is set, this CCT/Hue Group controls the Hue (colour) of a DALI DT8 device. The Saturation Group controls the Saturation (intensity) of a DALI DT8 device. • Used with both the Brightness Group and the CCT/Hue Group for on, off, and dimming control plus setting the RGB/RGBW colour and its intensity. NOTE: • The Saturation Group uses the Application Index defined in the Brightness Group.

				- The CCT/Hue Group is applicable to all controllable DALI devices (excluding Types C and D), yet functional for DALI DT8 device only. To assign a group: - Select the group name from the Saturation Group drop-down. - Click  to create new group name. Add Group pop-up is displayed. - Provide the details and click OK. The created group name will be populated in the Saturation Group drop-down. - Click  to modify the group name. Edit Group pop-up is displayed. - Edit the group name and click OK. Group name is updated. Mouse over on the Saturation Group info icon to view the tooltip message.
		RGB Mode RGB Mode field will appear for all types excluding type C and D devices.		You can configure the control of DALI coloured lighting solution to suit either 3-channel or 4-channel types to achieve the optimal outcome for coloured DALI lighting. Select the RGB mode.  Mouse over on the RGB Mode info icon to view the tooltip message.
		Application Index	This field is a combo box to select the application to be used for the group. The index is visible only when the application has been assigned in the Application section.	
		Warn Before off Time	When enabled, it adds a time delay between when the C-Bus group is turned off and when the DALI lights actually go off. For example, if the Warn Before Off Time is set to 5 minutes for DALI Group 1, and the C-Bus group linked to it is turned off (such as when a sensor times out), the lights in DALI Group 1 will stay on for another 5 minutes before turning off. This feature is useful for alerting occupants that the lights will soon turn off due to lack of movement. To keep the lights on, they simply need to move to re-trigger the sensor, which will turn the C-Bus group back on and cancel the countdown. This field displays amount of time after the group address is turned off. When you select the minutes from the Warn Before off Time drop-down, Warn Before Off Level drop-down is displayed.	
		Warn Before Off Level	Select the Warn Before Off Level. When Warn Before Off is enabled for a channel, and a command is received from C-Bus to turn the channel OFF, the channel does not immediately turn off. Instead it: - sets the channel level to the configured Warn Before Off Level, to warn any occupants that the light will turn off shortly. - starts a countdown timer set for the Warn Before Off Time: - When the timer expires, the channel turns OFF. - If another OFF command is received for the channel before the timer expires, the channel cancels the timer and turns off immediately.	
		Advanced	Primary Control Function	The Primary Control Function setting determines how DALI lighting behaves when a C-Bus Group on is turned ON or

			OFF. It allows the lights to fade up or down smoothly, rather than switching instantly. These settings set the DALI fade times used when an instant ramp on C-Bus is received. The fades for target levels of OFF and ON affect toggle type functions, allowing adjustment of the soft turn off/on. The fades for other levels affect things like the ON event for a Memory Toggle function, the release event of pushbutton dimming, or the smoothness of light level maintenance. Two presets are available such as Push Button Dimming and Scene Operations. Select the required preset value. Mouse over on the Primary Control Function info icon to view the tooltip message. Recommended Fade Settings: <table border="1"> <thead> <tr> <th>Primary Control Function</th><th>Soft Turn On</th><th>Soft Turn Off</th><th>Soft End Ramp</th></tr> </thead> <tbody> <tr> <td>Push-button Dimming</td><td>0.7s</td><td>0.7s</td><td>2s</td></tr> <tr> <td>Scene Operations</td><td>0.7s</td><td>0.7s</td><td>0.7s</td></tr> <tr> <td>Motion Sensor</td><td>0s</td><td>0.7s</td><td>2s</td></tr> <tr> <td>Day-light Harvesting</td><td>0.7s</td><td>0.7s</td><td>4s</td></tr> <tr> <td>Custom</td><td colspan="3">Choose your own values.</td></tr> </tbody> </table>	Primary Control Function	Soft Turn On	Soft Turn Off	Soft End Ramp	Push-button Dimming	0.7s	0.7s	2s	Scene Operations	0.7s	0.7s	0.7s	Motion Sensor	0s	0.7s	2s	Day-light Harvesting	0.7s	0.7s	4s	Custom	Choose your own values.		
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Scenes The categories allows to create trigger groups, each having action selectors assigned to it.	Broadcast Scene This field allows to add group for trigger application. Trigger groups can be created using  and each group created can assign maximum of 16 Action Selectors .			
	DALI Group Scene This field allows to add group for trigger application. Trigger groups can be created using  and each group created can assign maximum of 16 Action Selectors .			

Once configuring of the device is completed. Click **Save** in the **PROPERTIES** window to save the changes in the project database.

DALI ECG Devices

This section allows the user to configure different operational features for devices in the DALI line added to each network.

Unit Types

- DALI ECG DT1 (Emergency or Exit Light (Generic))
- DALI ECG DT1 A (Emergency or Exit Light (Switched Maintained Dimmable))
- DALI ECG DT1 B (Emergency or Exit Light (Switched Maintained Non-Dimmable))
- DALI ECG DT1 C (Emergency or Exit Light (Maintained))
- DALI ECG DT1 D (Emergency or Exit Light (Non – Maintained Dimmable))
- DALI ECG DT 6 (Single Channel LED Device)
- DALI 2x ECG DT 6 (DALI 2 Channel Device (DT6))
- DALI 3x ECG DT 6 (DALI 3 Channel Device (DT6))
- DALI 4x ECG DT 6 (DALI 4 Channel Device (DT6))
- DALI ECG (DALI ECG (Generic))
- DALI 2x ECG (DALI 2 Channel Device (Generic))
- DALI 3x ECG (DALI 3 Channel Device (Generic))
- DALI 4x ECG (DALI 4 Channel Device (Generic))
- DALI ECG DT8 (Single Channel Tunable / Color Controllable Device))

The field information to configure DALI ECG devices is as explained below:

Channel Info	Name	This field allows to modify the DALI Channel name.
	Description	This field allows to give description on channel device.
Applications This section displays the lighting applications supported by the DALI-2 Gateway. Up to four lighting applications can be defined and then used throughout the configuration of the DALI-2 Gateway.		
Control Mapping	Device Used	This field lets you know whether the device is physically available or not.

			By default, the check box is checked.		
	Address Mapping Address Mapping allows a C-Bus group address to directly control a DALI device. It is a one to one mapping of a C-Bus group address to a DALI device. NOTE: Only controllable DALI devices support Address Mapping. This section allows to assign maximum of 16 DALI group membership. NOTE: If the check box is selected, then the group is used for the device.	Brightness Group C-Bus group address is mapped to control the Address Mapping. IMPORTANT: The groups assigned in Line A, Line B, and DALI devices on each line has to be unique.	CCT/Hue Group C-Bus group address is used to control the CCT/ Hue of a DALI DT8 device.	- If a Saturation Group is not set, this CCT/ Hue Group controls the CCT (correlated colour temperature). Used in conjunction with the Brightness Group for on, off, and dimming control plus setting the white colour temperature (tuneable white). - If a Saturation Group is set, this CCT/Hue Group controls the Hue of a DALI DT8 device. NOTE: - The CCT/Hue Group uses the Application Index defined in the Brightness Group. - The CCT/Hue Group is applicable to all controllable DALI devices (excluding Emergency Types C and D), yet functional for DALI DT8 only.	
			Saturation Group C-Bus Group Address is used to control the Saturation of a DALI DT8 device.	- If a CCT/Hue Group is set, this CCT/Hue Group controls the Hue (colour) of a DALI DT8 device. The Saturation Group controls the Saturation (intensity) of a DALI DT8 device. - Used with both the Brightness Group and the CCT/Hue Group for on, off, and dimming control plus setting the RGB colour and its intensity. NOTE: - The Saturation Group uses the Application Index defined in the Brightness Group. - The CCT/Hue Group is applicable to all controllable DALI devices (excluding Emergency Types C and D), yet functional for DALI DT8 only.	
		Disable DALI to C-Bus Mapping	Check the checkbox to disable the DALI to C-Bus mapping		
		Application Index	This field is a combo box to select the application to be used for the group. The index is visible only when the application is been assigned in the application section.		
		Warn Before Off Time	This field displays the amount of time after the group address is turned off (1–15 minutes).		
		Advanced	Min Max Logic	This field gives the ability to pair 2 C-Bus group address to the same logical output and perform minimum and maximum logic.	
			Logic group Assignment	This field allows you to pair additional groups to the output.	
Virtual Groups This section refers to a category for virtual groups, which is an extension of DALI groups and allows to create a maximum of 16 Virtual groups.					
Device Control	Levels	Minimum Level	This field displays the minimum level for the device. This value cannot be lower than the Physical Minimum Level.		
		Maximum Level	This field displays the maximum level for the device.		
		Power On Level	This field displays the level that the device will reach when it powers on from an off state.		
		System Failure Level	This field allows to set system failure level.		
		Physical Minimum Level	This field displays the physical minimum level, which is defined by the manufacturer.		
		Emergency Level	This field displays the emergency level for the device if it was a DALI emergency and exit ECG. The device will reach this level when the mains power is out and the device is running on battery.		

		Prolong Time	This field displays the prolong time for this device.
		Test Timeout	This field displays the test timeout for the device. This refers to the count of how many times the device times outs before it stops the test.
		Physical Minimum Level	This is a read only field. This refers to the device physical minimum level.
		Emergency Minimum Level	This field displays the minimum level the DALI emergency and exit ECGs will reach. This field is for DALI emergency and exit ECGs only.
		Emergency Maximum Level	This field displays the maximum level the DALI emergency and exit ECGs will reach. This field is for DALI emergency and exit ECGs only.
		Rated Duration	This field displays the rate duration for the device.
	Lamp Time		
	This field displays the lamp running time. This is only updated when the device is extracted.		
	Remote On		
	This field is used to enable or disable Remote ON. If selected, the Remote ON is enabled. If cleared, the Remote ON is disabled.		
	Remote Off		
	This field is used to enable or disable Remote OFF. If selected, the Remote OFF is enabled. If cleared, the Remote OFF is disabled.		
Scenes			
NOTE: The user must have configured the scene configuration in the DALI Gateway lines.			
This is the category section for scenes, where a user is allowed to assign maximum 16 DALI scenes to each controllable devices.			
By assigning the scene, the user can set the level they want the scene to go to based on min and max level of the device.			
Minimum Level – minimum level the device has been set to.			
Maximum Level – maximum level the device has been set to.			
Led Light	Dimming Curve Type		
This is the category section for the dimming curve type.	This field displays the dimming curve type set for the DT6 device. This can be either standard dimming curve or linear dimming curve.		
Emergency Light	Status	Inhibit Mode	If checked, notifies when the device is in preventing mode.
		Function Test Done and Result Valid	If checked, notifies when the function test is completed and is valid.
		Duration Test Done Result Valid	If checked, notifies when the duration test is completed and is valid.
		Battery Fully Charged	If checked, notifies when the battery is fully charged.
		Function Test Request Pending	If checked, notifies when the function test request is pending.
		Duration Test Request Pending	If checked, notifies when the duration test request is pending.
		Identification Active	If checked, notifies when the device is identified (50/50, identify).
		Physically Selected	If checked, notifies if this device is the one physically selected.
	Mode	Rest Mode Active	If checked, will be in currently off mode.
		Normal Mode Active	If checked, will be in normal on mode.
		Emergency Mode Active	If checked, will be in emergency mode.
		Extended Emergency Mode	If checked, notifies when the extended emergency mode is in use.
		Function Test in Progress	If checked, notifies when the function test is in progress.
		Duration Test in Progress	If checked, notifies when the duration test is in progress.

		Hardwired Inhibit is Active	If checked, notifies when the hardwired inhibit is active.	
	Failure Status	Circuit Failure	If checked, notifies when there is circuit failure.	
		Battery Duration Failure	If checked, notifies when there is battery duration failure.	
		Battery Failure	If checked, notifies when there is battery failure.	
		Emergency Lamp Failure	If checked, notifies when there is emergency lamp failure.	
		Function Test Max Delay Exceeded	If checked, notifies when the function test max delay is exceeded.	
		Duration Test Max Delay Exceeded	If checked, notifies when the duration test max delay is exceeded.	
		Function Test Failed	If checked, notifies when the function test max delay is exceeded.	
		Duration Test Failed	If checked, notifies when the duration test is failed.	
	Features This section displays the parameters whose values get reported from the emergency application.	Integral Emergency Control If checked, the parameter value gets reported.		
		Maintained Control Gear If checked, the parameter value gets reported.		
		Switched Maintained Control Gear If checked, the parameter value gets reported.		
		Auto Test Capability If checked, the parameter value gets reported.		
		Adjustable Emergency Level If checked, the parameter value gets reported.		
		Hardwired Inhibit Supported If checked, the parameter value gets reported.		
		Physical Selection Supported If checked, the parameter value gets reported.		
		Relight in Rest Mode Supported If checked, the parameter value gets reported.		
		Light Source Life This field displays how long the device is been running for (in hours).		
	Battery Charge Percent This field displays the percentage of the battery on the current amount of time.			
	Duration Test Result Minutes This field displays how long the device has run duration test result.			
	Lamp Emergency Time This field displays how long the device has run its emergency mode.			
	Lamp Total time This field displays normal operation time along with emergency time.			
	Status This section is read-only. This will update only when extracted from the device	Control Gear Failure	If checked, notifies when there is a control gear failure.	
		Lamp Failure	If checked, notifies when there is a Lamp failure.	
		Lamp On	If checked, notifies when there is a Lamp On.	
		Limit error	If checked, notifies when there is a Limit error.	
		Fade Running	If checked, notifies when there is a Fade running.	

	Reset state	If checked, notifies when there is a Fade running.
	Short Address Missing	If checked, notifies when the short address is missing.
	Power Cycle Seen	If checked, notifies when the power cycle is seen (when the device is turned off and back on again).
	Thermal Overload Detected	If checked, notifies when the thermal overload is detected.
	Thermal Shutdown Detected	If checked, notifies when the thermal shutdown is detected.
	Load Decreased Detected	If checked, notifies when the load decrease is detected.
	Reference Measurement Failed	If checked, notifies when the reference measurement is failed.
	Load Increased Detected	If checked, notifies when there is a Fade running.
	Reconciled	If checked, notifies the device has been reconciled. If not checked, the device is not reconciled.
Device Identification	Short Address	This field displays the short address of the device.
	Object ID	This field displays the object ID of the device.
	GTIN	This field displays the GTIN number of the device and is updated only after the device is extracted.
	Serial	This field displays the device's serial number and is updated only after the device is extracted.
	Device Type 0	If selected, then the device is type 0. If cleared, then the device is not type 0.
	Device Type 1	If selected, then the device is type 1. If cleared, then the device is not type 1.
	Device Type 6	If selected, then the device is type 6. If cleared, then the device is not type 6.
	Device Type 8	If selected, then the device is type 8. If cleared, then the device is not type 8.
	DALI Version	This refers to the DALI version of the device and is updated after the device is extracted.

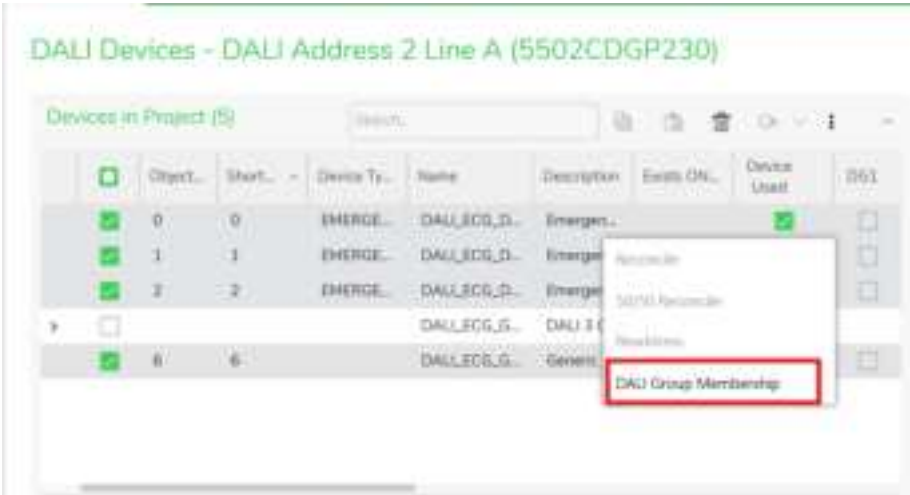
DALI Device Grouping

DALI device grouping is performed to quickly configure and save DALI Group Membership for multiple DALI devices in the project or on the live DALI line with less effort and time.

Prerequisites: Make sure the network has already been created in a project and DALI-2 Gateway has been added to the **Devices in Project** (project database).

1. Select the Network.
2. Click **DALI Devices**.
3. In the **Devices in Project** section, select the devices to be grouped.

4. Right-click and select **DALI Group Membership**.



DALI Group Membership pop-up appears.



NOTE: If the selected DALI device does not contain DALI Group Membership properties then the device appears disabled in the **Selected Project Devices** table.

5. Select the required **DALI Group** checkbox to configure DALI Group Membership for all the selected DALI devices and click **OK**.

DALI Group Membership

Selected Project Devices (3):

Object ID	Short Address	Device Type	Port On DALI Line
1	1	EMERGENCY-1	
2	2	EMERGENCY-2	
3	3	EMERGENCY-3	

DALI Group Membership:

DALI Group	Membership	Device Type	Port On DALI Line
DALI Group 1	☒	Lighting	→ (Reserved)
DALI Group 2	☒	Lighting	→ (Reserved)
DALI Group 3	☒	Lighting	→ (Reserved)
DALI Group 4	☒	Lighting	→ (Reserved)
DALI Group 5	☒	Lighting	→ (Reserved)
DALI Group 6	☒	Lighting	→ (Reserved)
DALI Group 7	☐	Lighting	→ (Reserved)
DALI Group 8	☒	Lighting	→ (Reserved)
DALI Group 9	☐	Lighting	→ (Reserved)
DALI Group 10	☐	Lighting	→ (Reserved)
DALI Group 11	☐	Lighting	→ (Reserved)
DALI Group 12	☒	Lighting	→ (Reserved)
DALI Group 13	☐	Lighting	→ (Reserved)
DALI Group 14	☒	Lighting	→ (Reserved)
DALI Group 15	☒	Lighting	→ (Reserved)
DALI Group 16	☐	Lighting	→ (Reserved)

Clear All Memberships

OK Cancel

NOTE: Click **Clear All Memberships** to unselect all the selected DALI groups.

DALI Group Membership configuration changes are saved to the selected project devices only.

6. In the **Line Devices** section, select the devices to be grouped. Follow the steps 4–5.



	Short Address	Device Type	Fault Status	Exists in Project	Device Used	DG1	DG2	DG3	DG4
	0	LED	NONE			☐	☐	☐	☐
	1	LED	NONE			☐	☐	☐	☐

Whenever you invoke **DALI Group Membership** for live devices, it will read the additional DALI information during the first scan, regardless of which DALI scan you completed.



NOTE: Only if **Read DALI Gateway** scan is completed, **C-Bus Mapping** is displayed for each DALI Group in the **DALI Group Membership** table.

For live DALI devices, when you click **OK**:

- Configurations are saved only to selected live network devices if it is a unreconciled device.
- Configurations are saved to the selected live network devices and project devices if it is a reconciled device.
- DALI Group Membership changes are saved.

The completed configuration activity can be seen in **DEPLOYMENT QUEUE**.



An **Error** pop-up appears if you try to load the same device into the **PROPERTY EDITOR** while deployment is still in progress.



PC Interfaces

The C-Bus PC interface units connect SpaceLogic C-Bus Commissioning software directly to the C-Bus network.

Unit Type

- 5500PC (PCINT4)
- 5500PCU (PCINTU)

The field information to configure PC Interface is as below:

Field		Description
Global This section allows users to check and update the C-Bus clock information.	C-Bus Clock	The C-Bus Clock check box enables/disables the resident C-Bus clock. The Enable C-Bus Clock check box is ticked (enabled) by default.
	Burden	The Enable Burden check box enables/disables the resident network burden. The Enable Burden check box is operational if the unit address is 001 and the Enable C-Bus Clock check box is ticked. Otherwise, the Enable Burden check box is non-operational [greyed]

		out]. If the operational Enable Burden check box is ticked, then the resident burden is enabled.
Unit Identification This section display the fields for identification of the unit.	Unit Type	The Unit Type field contains the unit type and unit description of the device.
	Firmware Version	The Firmware Version field shows the version number of the C-Bus interface firmware which exists on the physical network or which has been assigned to a logical representation of the unit in the database.
	Catalogue Number	The Catalog Number field contains the catalog number related to the unit type.
	Part Name	The Part Name field contains the part name which is stored in the unit hardware.
	Unit Address	This field displays the unit address assigned to the device.
	Serial Number	The Serial number field contains the serial number which exists on the physical network.
	Tag Name	The Tag Name field contains the name that user can give to the logical representation of the unit. This name can be up to 32 characters long and is stored in the project database only.
	Notes	The Notes field contains a location to add notes about the unit which is stored in the project database only.
Status The Status section contains information about the C-Bus network related functions located on the unit.	C-Bus Clock Active	The Clock Active indicates whether the C-Bus internal clock is enabled on this C-Bus unit. If activated, the indicator is lit. If not activated, the indicator is greyed out.
	Burden Active	The Burden Active indicates whether the C-Bus burden is active on this C-Bus unit. If active, the indicator is lit. If not active, the indicator is greyed out.
	Voltage	Voltage field contains the voltage level available to the unit. The voltage level displayed refreshes whenever the Update Status button is clicked.

C-Bus Automation Controllers

The C-Bus Network Automation Controller and C-Bus Application Controller units are DIN Rail-mounted C-Bus units. They enable C-Bus to perform complex conditional events, real-time scheduling, combinations of conditional events and scheduling, calculations, and protocol conversions. This support automation functions such as control and monitoring of C-Bus groups and scenes. The unit is programmed via its own internal web interface, which is accessible via a USB cable or an Ethernet network.

SpaceLogic C-Bus Commission supports the below automation and application controllers.

Unit Type

- 5500NAC (PC_NAC)
- 5500NAC (SYS_NAC)
- LSS5500NAC (PC_NAC)
- LSS5500NAC (SYS_NAC)

Unit Type

- 5500SHAC (PC_SHAC)
- 5500SHAC (SYS_SHAC)
- LSS5500SHAC (PC_SHAC)
- LSS5500SHAC (SYS_SHAC)

Unit Type

- 5500AC2 (PC_AC2)
- 5500AC2 (SYS_AC2)
- 5500NAC2 (PC_NAC2)
- 5500NAC2 (SYS_NAC2)

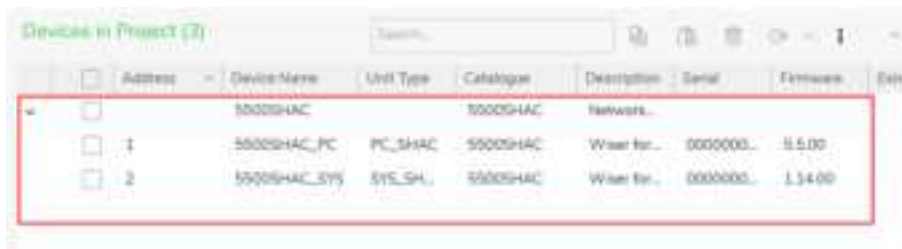
When any controller unit is added to the **Devices in Project**, three layers of the controller are displayed. They are IP layer, PC and SYS.

- IP Layer will not have any address, serial, firmware version or unit type.

- IP Layer cannot be readdressed.

NOTE: Ensure that the PC and SYS levels are readdressed as per current implementation without losing the IP layer.

- The SYS and PC layer are used to configure, reconcile and deploy to the device.
- The SYS and PC layer cannot be deleted independently.
- When loading the IP layer in **Property** window, the **Deploy to network** is disabled.



Connect to the controllers: Configure IP layer of the controllers to sync or connect to the controllers or can enter manually at the time of connection.

Controller sync functions: Controller sync consists of 2 functions:

- **Push:** Push (Transfer) function is used to push the object list to the controller.
- **Pull:** Pull (Retrieve) function is used to pull the data back from the controller and store data in the project.

The field information to configure SpaceLogic C-Bus Automation Controllers is explained below:

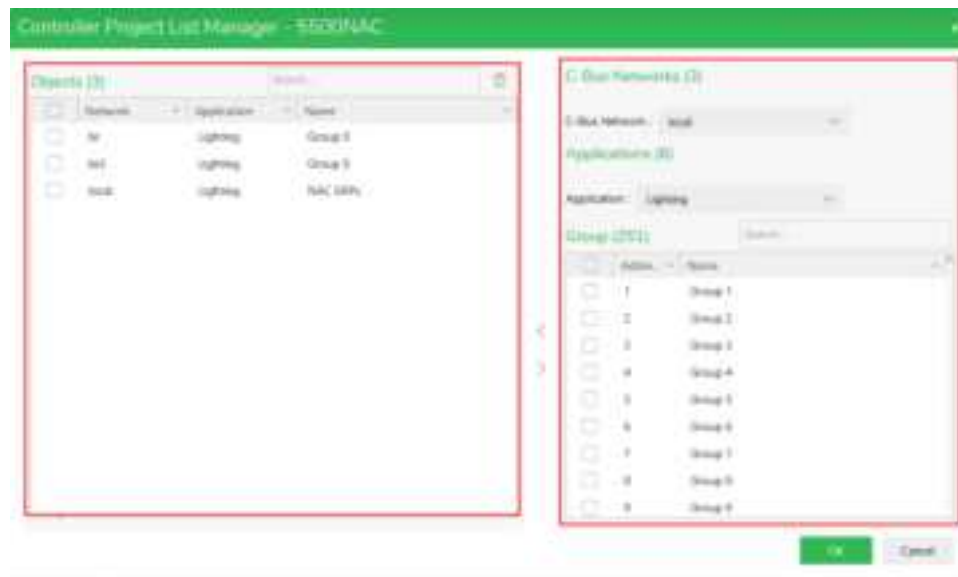
IP layer/group layer	Local Connection Service	IP Address/Host	IP address of the controller.
		C-Bus Port	Default 10001.
		USB IP Address	Default IP address for USB connection.
		Mac Address	Mac address of the controller (read-only).
		HTTP PORT	Default 80 (range restricted to 16-bit unsigned integer 0 -65535).
		HTTPS PORT	Default 443 (range restricted to 16-bit unsigned integer 0 -65535).
	Remote Connection Service	IP Address/Host	IP address of the remote device.
		C-Bus Port	Default 10001 (range restricted to 16-bit unsigned integer 0 -65535).
		HTTP PORT	HTTP port of the device (range restricted to 16-bit unsigned integer 0 -65535).
		HTTPS PORT	HTTPS port of the device (range restricted to 16-bit unsigned integer 0 -65535). 
	Controller Configuration IMPORTANT: Configuring of the device is done only on the Devices in Project (project database).	Controller Sync	Object List, page 272
			To create object lists click  .
			Transfer , page 274
			Retrieve, page 277

SYS_INTERFACE (NAC/SHAC/NAC2/ AC2)	Global This section allows users to check and update the C-Bus clock information.	C-Bus Clock	This check box enables/disables the resident C-Bus clock. The Enable C-Bus Clock check box is ticked (enabled) by default. 
		IP Address	N/A
		USB IP Address	Default (read only)
		Mac Address	N/A
	Unit Identification This section display the fields for identification of the unit.	Unit Type	This field contains the unit type of the device.
		Firmware Version	This field shows the version number of the C-Bus interface firmware which exists on the physical network or which has been assigned to a logical representation of the unit in the database. NOTE: For SYS_NAC/SHAC, the minimum firmware version to support is 1.14.00.
		Catalogue Number	This field contains the catalog number related to the unit type.
		Part Name	This field contains the part name which is stored in the unit hardware.
		Unit Address	This field displays the unit address assigned to the device.
		Serial Number	This field contains the serial number which exists on the physical network.
		Tag Name	This field contains the name that user can give to the logical representation of the unit. This name can be up to 32 characters long and is stored in the project database only
	Status This section contains information about the C-Bus network related functions located on the unit.	Notes	This field contains a location to add notes about the unit which is stored in the project database only.
		C-Bus Clock Active	This field indicates whether the C-Bus internal clock is enabled on this C-Bus unit. If activated, the indicator is lit. If not activated, the indicator is greyed out.
		Voltage	This field contains the voltage level available to the unit.
PC_INTERFACE (NAC/SHAC/NAC2/ AC2)	Global This section allows you to check and update the C-Bus clock information.	C-Bus Clock	Select the check box to enable the resident C-Bus clock. Once you select the C-Bus Clock check box, the Save button is enabled. 

	Unit Identification This section displays the fields for identification of the unit.	Unit Type	This field contains the unit type of the device.
		Firmware Version	This field shows the version number of the C-Bus interface firmware which exists on the physical network or which has been assigned to a logical representation of the unit in the database. NOTE: For PC_NAC/SHAC, the minimum firmware version to support is 5.5.00.
		Catalogue Number	This field contains the catalog number related to the unit type.
		Part Name	This field contains the part name which is stored in the unit hardware.
		Unit Address	This field displays the unit address assigned to the device.
		Serial Number	This field contains the serial number which exists on the physical network.
		Tag Name	This field contains the name that user can give to the logical representation of the unit. This name can be up to 32 characters long and is stored in the project database only
		Notes	This field contains a location to add notes about the unit which is stored in the project database only.
	Status This section contains information about the C-Bus network related functions located on the unit.	Voltage	This field contains the voltage level available to the unit.

Object List Manager

Object list manager allows you to work with assigned groups and levels of an application to the object list.



Controller Project List Manager window is displayed, which consists of the following:

Objects	Network	Displays network name of the selected object.
	Application	Displays application name of the selected object.
	Name	Displays name of the selected object.
	Search	To search the existing objects in the object list, type the object name/application/network name in search bar.
	Delete	Select the object list and click  .
C-Bus Networks	C-Bus Network	All the available C-Bus networks are displayed in the drop-down.
	Applications	All the available applications in the selected network are displayed in the drop-down. NOTE: Applications of the selected network will be displayed.
	Search	Depending on the type of application is selected groups, channels or devices can be searched using search bar.
Depending on the type of application is selected, groups, channels or devices are displayed.		
Lighting Application	Group of the lighting application is displayed.	Address. Displays address of the group/enable group.
Enable	Group of the enable application is displayed.	Name. Displays name of the group/enable group.
Measurement Application	Channels of the measurement/error application are displayed.	Device ID. Device ID to identify specific C-Bus unit from measurement/error application.
		Device Name. Displays name of the device.
Error Application		Channel ID. Object Id assigned to DALI Gateway (0–255).
		Channel Name. Specifies the name of the channel.

Emergency Exit Light	Devices of the emergency exit light application are displayed.	CDG Name. Displays C-Bus DALI-2 Gateway name.
		Line Name. Displays DALI line name.
		EEL Name. Displays Emergency Exit Light application name.
		Object ID. Displays the Object ID of the device.
		Test Group. Displays the assigned test group.

1. Click  to add objects from **C-Bus Network** to the **Object**.
2. Click  to remove objects from **Object**.
3. Click **OK** to save the object lists to project database.

IMPORTANT:

- The remote C-Bus network in the current project (connected via C-Bus bridge) allows up to a maximum of 19 networks along with local network (and 5 bridge networks deep max) allows to add objects in the object list section. Once the maximum limit is reached, the list of networks in the C-Bus Network will be disabled.
- To use the disabled network, remove the objects in the object list.
- Objects added to the list define the networks that will be used in the controller.

Transfer

The configurations in the SpaceLogic C-Bus Commission can be pushed to the C-Bus Controllers via push operation.

The created objects are pushed to the controller using **Transfer** button.

1. Once the objects list are created, click **Transfer**. The **C-Bus Controller Authentication** window is displayed.



The image shows a screenshot of the 'C-Bus Controller Authentication' dialog box. It has a green title bar with the text 'C-Bus Controller Authentication' and a close button. The dialog contains the following fields:

- Interface:** A dropdown menu showing 'Local TCP connection'.
- Username:** A text field containing 'admin'.
- Password:** A text field with a red border and a small eye icon on the right to toggle visibility.
- * Required fields:** A label indicating that the username and password fields are mandatory.
- Buttons:** At the bottom, there are two buttons: 'Login' (highlighted in green) and 'Cancel'.

2. Select the **Interface** type from drop-down.

- Local TCP Connection
- Remote TCP Connection
- USB Connection

NOTE: The IP address for Local, Remote and USB are fetched from the details configured in the IP layer.

- Temporary TCP Connection

For temporary connection, you need to enter additional IP address and HTTPS port details.

A screenshot of the 'C-Bus Controller Authentication' dialog box. It has a green title bar. The 'Interface' dropdown is set to 'Temporary TCP connection'. Below it are input fields for 'IP Address / Host', 'HTTPS Port' (with '443' entered), 'Username' (with 'admin' entered), and 'Password'. There is a 'Remember Me' checkbox and 'Login' and 'Cancel' buttons at the bottom.

3. Enter the password.

NOTE: If you enter wrong password, **Authentication Failed** message is displayed.

4. Click **OK** and re-enter the password.

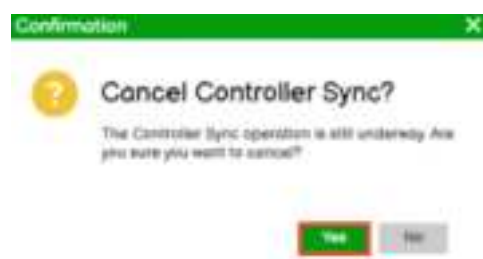
5. Click **Login**.

The **C-Bus controller Sync** process window is displayed.



The tag map and object informations are transferred to C-Bus Controllers.

NOTE: Click **Cancel** to cancel the syncing.



Click **Yes**.

IMPORTANT: While transferring :

- If there are any duplicates items identified (application, group or label name), **C-Bus Controller Sync** window is displayed indicating the duplicate items.



6. Click **Continue** to resolve duplicate items.

If any conflict items are identified, **C-Bus Controller Sync** window is displayed indicating the conflicts.



7. Click **Continue** to resolve the conflict.

On successful transfer, transfer completion message is displayed.



8. Click **OK** to complete the transfer.

Retrieve

The configurations done in the controllers can be pulled from C-Bus Controller to the SpaceLogic C-Bus Commission using pull operation.

The created objects are pulled to the SpaceLogic C-Bus Commission using **Retrieve** button.

NOTE: When you extract any C-Bus device and try to configure controllers in parallel, the **Retrieve** button is disabled.

1. Click **Retrieve**. **C-Bus Controller Authentication** window is displayed.



The screenshot shows the 'C-Bus Controller Authentication' dialog box. It has a green title bar. Inside, there's a dropdown menu for 'Interface' set to 'Local TCP connection'. Below it are text fields for 'Username' (containing 'admin') and 'Password' (which is empty and highlighted with a red rectangle). At the bottom are 'Login' and 'Cancel' buttons.

2. Select the **Interface** type from drop-down.

- Local TCP Connection
- Remote TCP Connection
- USB Connection

NOTE: The IP address for Local, Remote and USB are fetched from the details configured in the IP layer.

- Temporary TCP Connection

For temporary connection, you need to enter additional IP address and HTTPS port details.



This screenshot shows the same dialog box but with 'Interface' set to 'Temporary TCP connection'. It now includes additional fields: 'IP Address / Host' and 'HTTPS Port' (set to '443'). The 'Username' field still contains 'admin' and the 'Password' field is empty and highlighted with a red rectangle. 'Login' and 'Cancel' buttons are at the bottom.

3. Enter the password.

NOTE: If you enter the wrong password, **Authentication Failed** message is displayed.



4. Click **OK** and re-enter the password.

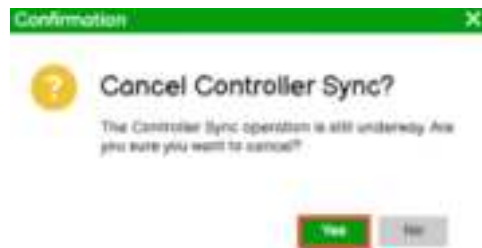
- Click **Login. C-Bus controller Sync** pop-up window is displayed.



While retrieving (pull operation) data from C-Bus controllers, objects can be updated, deleted or added.

NOTE:

- To cancel the syncing, click **Cancel**.



Click **Yes**.

- An error message is displayed if the controller configuration is failed.



Check the local and network IP address of the controller and re-login.

IMPORTANT: While retrieving :

- If any duplicates items are identified (application, group or label name), **C-Bus Controller Sync** window is displayed indicating the duplicate items



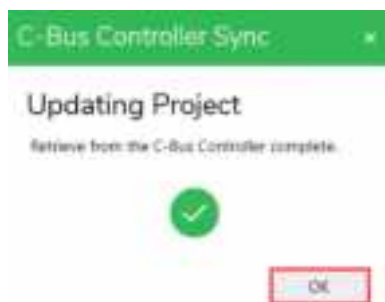
6. Click **Continue** to resolve duplicate items.

If any conflict items are identified, **C-Bus Controller Sync** window is displayed indicating the conflicts.



7. Click **Continue** to resolve the conflict.

On successful retrieve, completion message is displayed.



8. Click **OK** to complete the retrieve.

C-Bus Network Interface

The C-Bus Network interface units connect SpaceLogic C-Bus Commissioning software via the port address.

Unit Type

- 5500CN2 (PC_CNICD)

The field information to configure C-Bus Network Interface (CNI) is as below:

Field		Description
Global This section allows users to check and update the C-Bus clock information.	C-Bus Clock	The C-Bus Clock check box enables/disables the resident C-Bus clock. The Enable C-Bus Clock check box is ticked (enabled) by default
	Burden	The Enable Burden check box enables/disables the resident network burden. The Enable Burden check box is operational if the unit address is 001 and the Enable C-Bus Clock check box is ticked. Otherwise, the Enable Burden check box is non-operational [greyed out]. If the operational Enable Burden check box is ticked, then the resident burden is enabled

Unit Identification This section display the fields for identification of the unit.	Unit Type	The Unit Type field contains the unit type and unit description of the device
	Firmware Version	The Firmware Version field shows the version number of the C-Bus interface firmware which exists on the physical network or which has been assigned to a logical representation of the unit in the database
	Catalogue Number	The Catalog Number field contains the catalog number related to the unit type
	Part Name	The Part Name field contains the part name which is stored in the unit hardware
	Unit Address	This field displays the unit address assigned to the device
	Serial Number	The Serial number field contains the serial number which exists on the physical network
	Tag Name	The Tag Name field contains the name that user can give to the logical representation of the unit. This name can be up to 32 characters long and is stored in the project database only
	Notes	The Notes field contains a location to add notes about the unit which is stored in the project database only
Status The Status section contains information about the C-Bus network related functions located on the unit.	C-Bus Clock Active	The Clock Active indicates whether the C-Bus internal clock is enabled on this C-Bus unit. If activated, the indicator is lit. If not activated, the indicator is greyed out
	Burden Active	The Burden Active indicates whether the C-Bus burden is active on this C-Bus unit. If active, the indicator is lit. If not active, the indicator is greyed out
	Voltage	Voltage field contains the voltage level available to the unit. The voltage level displayed refreshes whenever the Update Status button is clicked

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Components: WPFLocalizeExtension

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Components: Java Runtime environment 8

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Components: grizzly-http-server

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Components: logback-classic

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