

SIEMENS

SIEMENS Channel Multiplier

User Guide



Supplementary information

Purpose of the user guide

The user guide provides detailed descriptions of the program's functions.

Target group of the user guide

The user guide is designed for people who have attended an ETS course and want to copy the settings of a channel to another channel or another device.

Product documentation and support

Product documentation

Documents related to the KNX devices, such as operating and installation instructions, technical product information, application description, product database, additional software and CE declarations can be downloaded from the following website:

<http://www.siemens.com/gamma-td>



Frequently asked questions

For frequently asked questions about the product and their solutions, see:

<https://support.industry.siemens.com/cs/ww/en/ps/faq>



Support

Contact details for additional questions relating to the product:

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<http://www.siemens.com/supportrequest>



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1 Function description of the “SIEMENS channel multiplier”

The “SIEMENS channel multiplier” app is an extension of the ETS software. This extension makes it possible to copy settings that have been made for a channel (source channel) into one or more other channels (destination channels). This means that source and destination channels have the same settings without the need to have to enter these manually in the target channels.

The settings can be copied to a channel of the same device or to a channel of another device provided the other device is compatible (Compatible devices [→ 6]). When selecting channels of different devices, a unique ID is generated for each device so that the selection is retained even if the physical address is changed.

Only channel-specific settings can be copied. Device-specific settings cannot be copied or exported.

Group addresses

The group addresses of the communication objects of the destination channels are retained during a copy process, if both of the following conditions are met:

- After copying, the same communication objects are still visible.
- The data type of the communication objects still has the same length.

Group addresses of communication objects can optionally be copied as well. In this case, the original assignments of the affected communication objects are deleted.

Flags

Flags of the communication objects can optionally be copied as well.

Description of communication objects

Saving settings

The description of communication objects is automatically copied as well.

You can store the selection of the source channel and the destination channels to reuse it at a later stage (e.g. when changing settings). The selection is saved in the ETS project and is independent of the physical address of the device.

The settings of the source channel can also be exported, stored outside of the ETS project, and re-imported when required. This function makes it possible, for example, to re-use the settings of a channel in another ETS project.



2 Compatible devices

You can use the “SIEMENS channel multiplier” app to copy the channel settings within the following device families:

- Switching actuators
 - N 530Dx1 V1
 - N 532Dx1 V1
 - N 534Dx1 V1
- Switching actuators, switching actuators LC
 - N 530Dx1 V3
 - N 532Dx1 V3
 - N 534Dx1 V3
 - N 535Dx1 V3
- Dimmer
 - N 554Dx1 V1
- Blind
 - 5431DBx1 V1



Example 1: The settings of a channel of switching actuator N 530Dx1 V1 cannot be copied to a channel of switching actuator N 530Dx1 V3.

Example 2: The settings of a channel of dimmer N 554Dx1 V1 cannot be copied to a channel of switching actuator N 530Dx1 V1.

Example 3: The settings of a channel of switching actuator N 530Dx1 V1 can be copied to a channel of switching actuator N 532Dx1 V1.



3 Overview of the user interface of the “SIEMENS channel multiplier” app

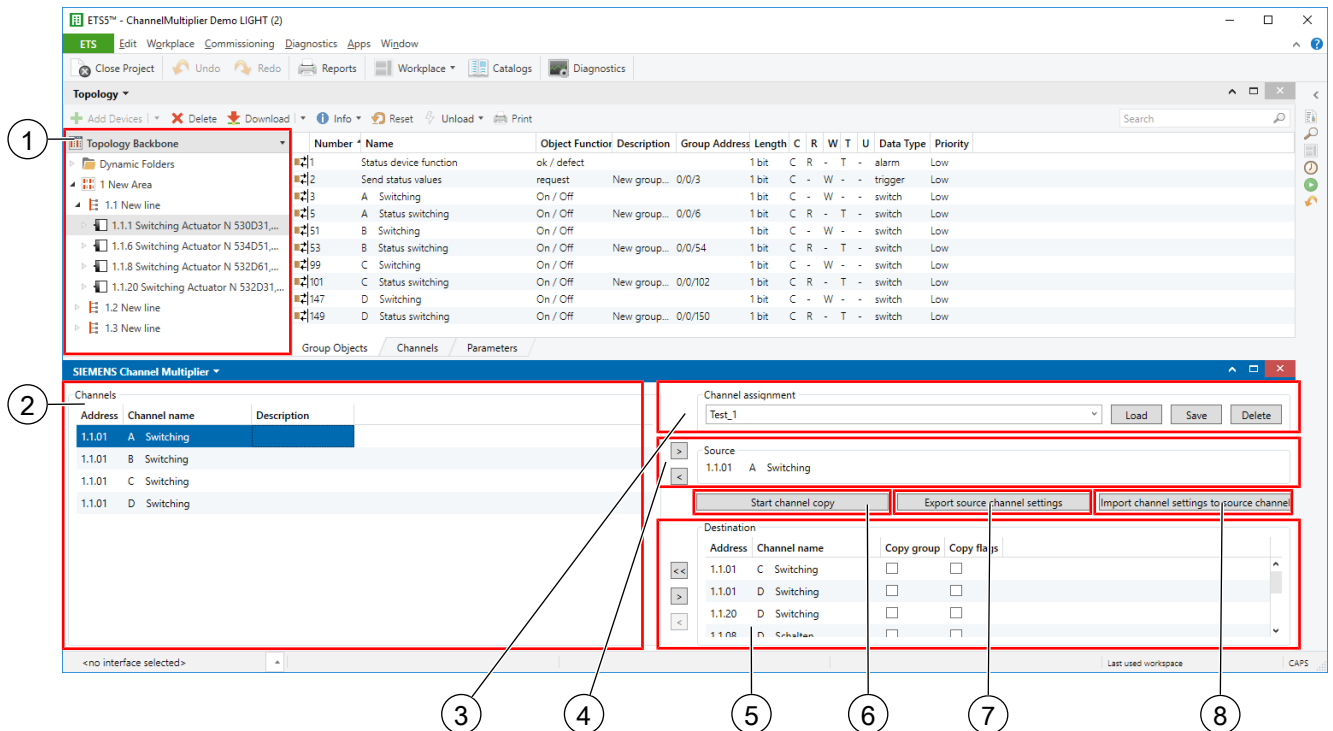


Fig. 1: Overview of the “channel multiplier” app

- | | |
|---|---|
| <p>1 “Topology Backbone” section of the ETS software (example)
Displays the devices belonging to the ETS project</p> | <p>2 “Channels” section of the ETS software
Displays the channels of the device that has been selected in the “Topology Backbone” section or another section of the ETS software.</p> |
| <p>3 “Channel assignment” section
Input field, drop-down list and buttons for saving, loading and deleting selected channels.
Saving, loading and deleting the selection of channels [→ 11]</p> | <p>4 “Source” section
Button for adding and removing the source channel
Displays the selected source channel</p> |
| <p>5 “Destination” section
Button for adding and removing the destination channels
Displays the selected destination channels</p> | <p>6 “Start channel copy” button
Copying the settings of a channel [→ 9]</p> |
| <p>7 “Export source channel settings” button
Exporting and importing source channel settings [→ 12]</p> | <p>8 “Import channel settings to source channel” button
Exporting and importing source channel settings [→ 12]</p> |

4 Installation

System requirements

- ETS 5

Installation

1. Purchase and download the installation file of the “SIEMENS channel multiplier” app from the website <https://www.knx.org>.
2. Open the “ETS” software.
3. In the status bar of the ETS software, click “Apps.”
⇒ A list of installed apps opens.
4. Click the green plus icon.
⇒ The “Select an ETS app” window appears.
5. Select the downloaded installation file and confirm the installation by choosing “Open”.
⇒ The “SIEMENS channel multiplier” app is installed.



5 Use

5.1 Copying the settings of a channel

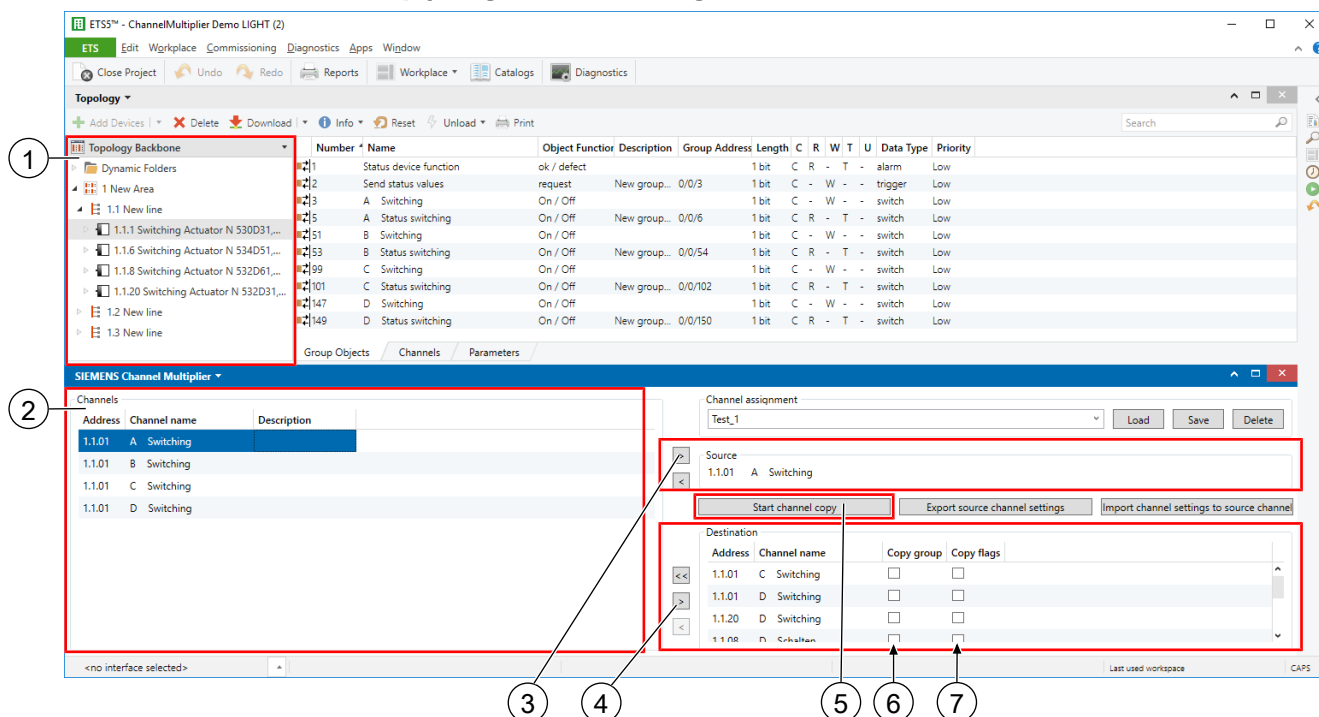


Fig. 2: Copying the settings of a channel

- | | | | |
|---|---|---|---|
| 1 | Displays the devices belonging to the ETS project | 2 | Displays the channels of the device that has been selected the "Topology Backbone" section or another section of the ETS software |
| 3 | ">" button for defining a channel as a source channel | 4 | ">" button for defining the destination channels |
| 5 | "Start channel copy" button | 6 | "Copy group" checkbox |
| 7 | "Copy flags" checkbox | | |

▷ Channel settings have been made and tested.

▷ The "SIEMENS channel multiplier" app is open in the ETS and is visible as part of the screen.

1. In a section of the ETS project (1), select the device to which the channel whose settings you want to copy belongs.

⇒ In the "Channels" (2) section of the "SIEMENS channel multiplier" app, all channels of this device are listed.



Alternatively, you can also select a row in the topology. In this case, all channels of the devices in this line are listed in the "Channels" (2) section of the "SIEMENS channel multiplier" app.

After selecting a source channel, only the channels of devices that are compatible with the device of the source channel are shown.

2. Select the channel whose settings are to be copied and use the ">" (3) button to move it into the "Source" section.

⇒ The channel has been defined as the source channel.



If you subsequently notice that an incorrect channel has been selected as the source channel, use the ">" (3) button to specify a new channel. The destination channels are retained.

If the source channel is removed using the "<" button, the destination channel selection is lost.

3. Select the channels of the selected device that are supposed to receive the same settings and use the ">" button to move them into the "Destination" (4) section.

Multiple selections are possible via the "Ctrl" or "Shift" button.

⇒ The channels are defined as "destination channels."

4. If desired, select additional devices of the same device family in a section of the ETS project (1).

Multiple selections are possible via the "Ctrl" or "Shift" button.

⇒ In the "Channels" (2) section of the "SIEMENS channel multiplier" app, all channels of the selected devices are listed. Channels of incompatible devices are not listed.

5. Select the channels of the chosen devices that are supposed to receive the same settings and use the ">" button to move them into the "Destination" (4) section.

Multiple selections are possible via the "Ctrl" or "Shift" button.

⇒ The channels are also defined as "destination channels."

6. If the group addresses are to be copied as well, activate the "Copy groups" (6) checkbox for the respective destination channel. For more information on copying the group addresses, see "group addresses [→ 5]."

7. If the set flags of the communication objects are to be copied as well, activate the "Copy flags" (7) checkbox for the respective destination channel.

8. Click the "Start channel copy" (5) button.

⇒ The settings of the source channel are copied to the destination channels.

⇒ The progress is displayed.



5.2 Saving, loading and deleting the selection of channels

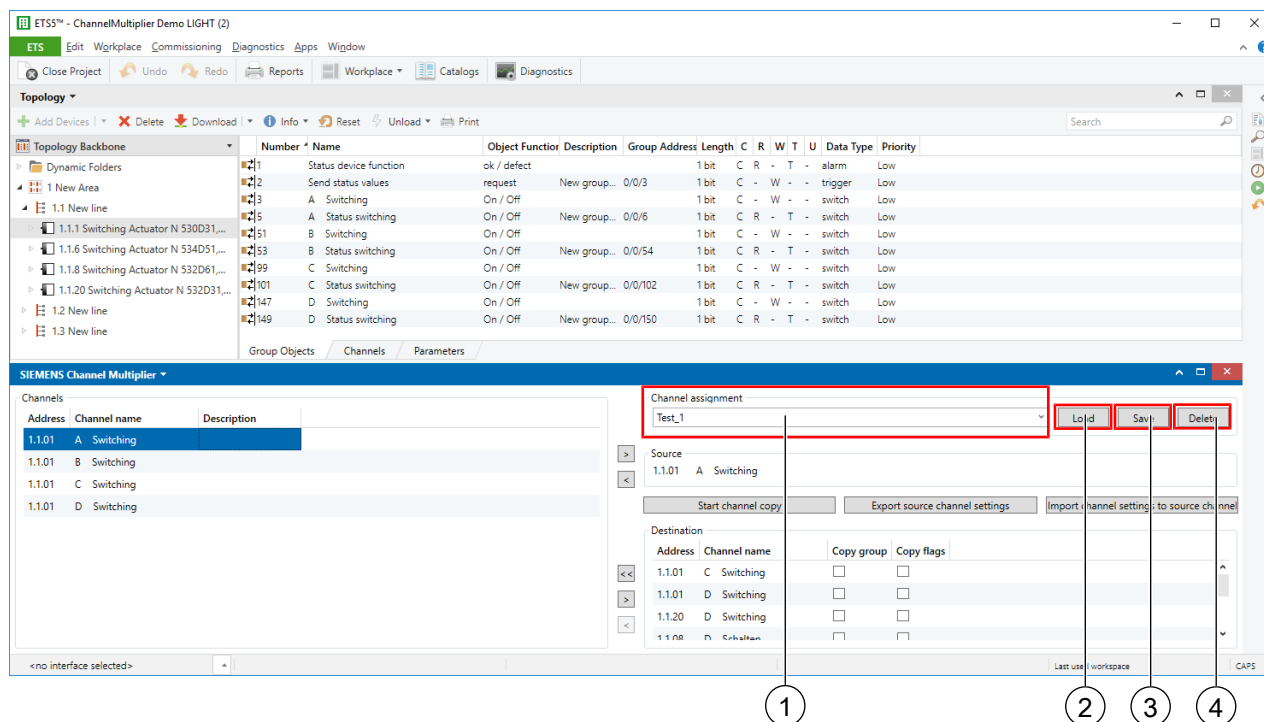


Fig. 3: Save, load, delete channel selection

- | | | | |
|---|--|---|-----------------|
| 1 | Input field for the name of the channel selection and drop-down list for selecting a saved channel selection | 2 | “Load” button |
| 3 | “Save” button | 4 | “Delete” button |

Saving the selection of channels

- The source channel and destination channels have been selected (Copying the settings of a channel [→ 9]).

1. In the “Channel assignment” (1) input field, enter a name for the channel selection.
 2. Click the “Save” (3) button.
- ⇒ The channel selection is saved in the ETS project.



A link to a device available in the ETS project is saved, but not the device or the settings of the device.

That means: If the device is deleted from the ETS project, the destination of the link is no longer available and the channel selection can no longer be loaded.

Loading a saved channel selection

- ▷ A selection of channels has been saved in the ETS project (Saving the selection of channels [→ 11]).
- 1. In the “Channel assignment” (1) drop-down list, select the channel selection to be loaded.
- 2. Click the “Load” (2) button.
- ⇒ The channel selection is loaded and visible in the “Source” and “Destination” sections.

Deleting a saved channel selection

- ▷ A selection of channels has been saved in the ETS project (Saving the selection of channels [→ 11]).
- 1. In the “Channel assignment” (1) drop-down list, select the channel selection to be deleted.
- 2. Click the “Delete” (4) button.
- ⇒ The channel selection is deleted.

5.3 Exporting and importing source channel settings

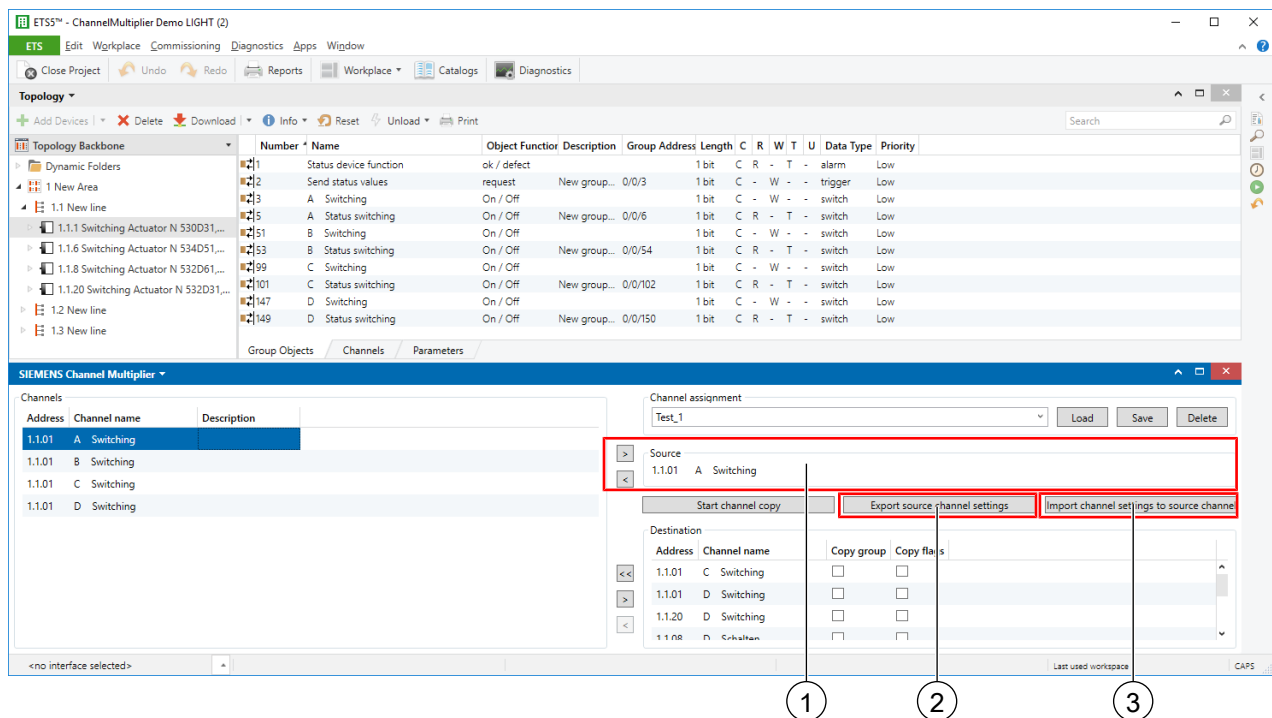


Fig. 4: Exporting and importing source channel settings

- | | |
|---|--|
| <p>1 Displays the selected source channel</p> <p>3 “Import channel settings to source channel” button</p> | <p>2 “Export source channel settings” button</p> |
|---|--|

Exporting source channel settings

- ▷ The source channel (1) has been selected (Copying the settings of a channel [→ 9]).
- 1. Click the “Export source channel settings” (2) button.
 - ⇒ The “Save as” window opens.
- 2. Enter the storage location and file name and click “Save.”
 - ⇒ The settings of the source channel are saved.

Importing source channel settings

- ▷ Channel settings have been exported (Export source channel settings [→ 13]).
- 1. Select the channel that is supposed to receive the settings of the exported channel as the source channel (1).
- 2. Click the “Import channel settings to source channel” (3) button.
 - ⇒ The “Channel import settings” window opens.
- 3. If group addresses are to be imported, activate the “Import groups” checkbox.
- 4. If flags of the communication objects are to be imported, activate the “Import flags” checkbox.
- 5. Click the “Search” button to select the previously exported channel settings and choose “Open” to confirm the selection.
 - ⇒ The path and file names of the channel settings are visible in the “Import file path” input field.
- 6. Click the “Import” button.
 - ⇒ The settings are imported and saved in the source channel.



6 Help in case of errors and problems

6.1 Frequently asked questions

Frequently asked questions

For frequently asked questions regarding the product and their solutions, see:

<https://support.industry.siemens.com/cs/ww/en/ps/faq>



6.2 Possible errors

Description	Possible cause	Solution
A device has been selected in the "Devices" section but no channels are displayed in the "Channels" section.	The device that has been selected is not compatible with the device to which the source channel ("Source" section) belongs. A channel of the selected device can therefore not be selected as the destination channel and is therefore not displayed in the "Channels" section.	Select a device that is compatible with the set source channel. Compatible devices [→ 6]
While loading a channel assignment, the following error message appears: "The channel (1.2.34 – X) is disabled, please enable all used channels first."	A channel that is used in the channel assignment is disabled.	Re-enable the channel mentioned in the error message in the Device Settings of the device.
While importing source channel settings, the following error message appears: "The imported data is not compatible with the selected application."	The source channel that has been selected and is displayed in the "Source" section is not compatible with the source channel whose settings are imported.	Select the source channel that is compatible with the source channel whose settings are to be imported. Or: In the settings for the import, select the import file of the channel that is compatible with the selected source channel. Exporting and importing source channel settings [→ 12]
While importing source channel settings, the following error message appears: "The assignment of the group address has failed: Group address 'x/y/z New group address' could not be connected to the communication object '<number and name of the communication object>'. Different object size."	The group addresses are connected to data types that are not compatible with the selected source channel.	Repeat the import of the source channel settings without the "Copy group" option. Exporting and importing source channel settings [→ 12]



Description	Possible cause	Solution
While loading a saved channel assignment, the following error message appears: “Load error – Load channel selection error: at least one device was not found.”	At least one device that is included in the channel assignment was deleted from the ETS project beforehand.	If a backup of the project was created prior to deleting the devices, use the backup copy of the project. If no backup is available, create the channel assignment again. Copying the settings of a channel [→ 9]
During copying, an error appears stating that the versions of the devices are not compatible.	One or more devices of the loaded channel assignment have been updated in the meantime. Version V1 are not compatible with V3.	Create the channel assignment anew using devices of version V3. Copying the settings of a channel [→ 9]

6.3 Troubleshooting using ETS

The ETS offers the following error analysis options, among others:

‘Diagnostics’ section

In this area, the physical addresses, the group monitor and the bus monitor can be checked, among others.

‘Reports’ area:

In this area, details on the various areas of the project can be exported as a file or printed directly.



For more information on ETS, see the online help of the ETS software.



Key terms

B		
Blind	6	
C		
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