

# New Features of ELCAD/AUCOPLAN 2018

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## Content

<b>1</b>	<b>New Features of ELCAD/AUCOPLAN Version 2018 .....</b>	<b>1</b>
<b>1.1</b>	<b>New in Project Editing .....</b>	<b>2</b>
1.1.1	Freeze Cores During Project Reconstruction .....	2
1.1.2	Enhancement of the Function Replace Symbol Texts and Free Texts.....	3
1.1.3	Structured Storage of External, Project-related Documents.....	3
1.1.4	New Process Function Execute Import Protocol From File .....	4
1.1.5	The Project Check Verifies the Storage of External Documents .....	5
1.1.6	New Tree Functionality: Reset to Default Colours.....	6
1.1.7	Transfer Markings at Drawings During Copying .....	6
1.1.8	Translate the Translate References in the ASCII Output.....	7
1.1.9	Update Drawings with User Selection Lists.....	8
<b>1.2</b>	<b>New in Drawing Editing .....</b>	<b>9</b>
1.2.1	Editing Main Representations Will Also Change Secondary Representations .	9
1.2.2	Access to the ELCAD Studio Device Table During Editing.....	9
1.2.3	Extension of the Context Menu in Drawing Editing .....	11
<b>1.3</b>	<b>New in List Editing.....</b>	<b>11</b>
1.3.1	New Check of Potential Reference Chains in Status Lists.....	11
1.3.2	Information on Marked Drawings in the Table of Contents .....	12
1.3.3	The Wiring List Uses the Structure That Has Been Defined in the Settings .	12
<b>1.4</b>	<b>New in ELCAD/AUCOPLAN Studio .....</b>	<b>13</b>
1.4.1	Automatic Alignment Between ELCAD/AUCOPLAN Studio Tables and Form Sheets / Window Symbols.....	13
<b>1.5</b>	<b>New in the Terminal Block Designer .....</b>	<b>14</b>
1.5.1	Conversion of Existing Terminals Into Multi-level Terminals.....	14
<b>1.6</b>	<b>New in Cable Editing.....</b>	<b>16</b>
1.6.1	New Settings for Cable Lists and Cable Assignment Lists .....	16
1.6.2	New Conventions for the Automatic Generation of Cable Designations .....	17
<b>1.7</b>	<b>New in the Interfaces .....</b>	<b>18</b>
1.7.1	New Version of the WAGO smart Designer Interface .....	18

# **1 New Features of ELCAD/AUCOPLAN Version 2018**

In ELCAD/AUCOPLAN version 2018, the leading motto once again is: an augmented overview and a better orientation in your project data, combined with an optimized handling.

In this context, additional functionalities are now available as process actions, and managing processes and batches has again been facilitated and made more consistent.

Moreover, we have once again scrutinized your requirements and requests and derived a variety of new features from them. With the current version, processing steps have again become more efficient, and relevant objects and data are much easier to access.

As in all our extensions, we have again focused on keeping your data compatible and optimizing the handling.

With ELCAD/AUCOPLAN 2018, AUCOTEC AG has now changed the version designations of all its products to the respective year. Therefore, ELCAD 7.13 has now become version ELCAD 2018. This adjustment is also applicable to the user and data directories of ELCAD/AUCOPLAN on your computers and servers.

Hanover, February 2018

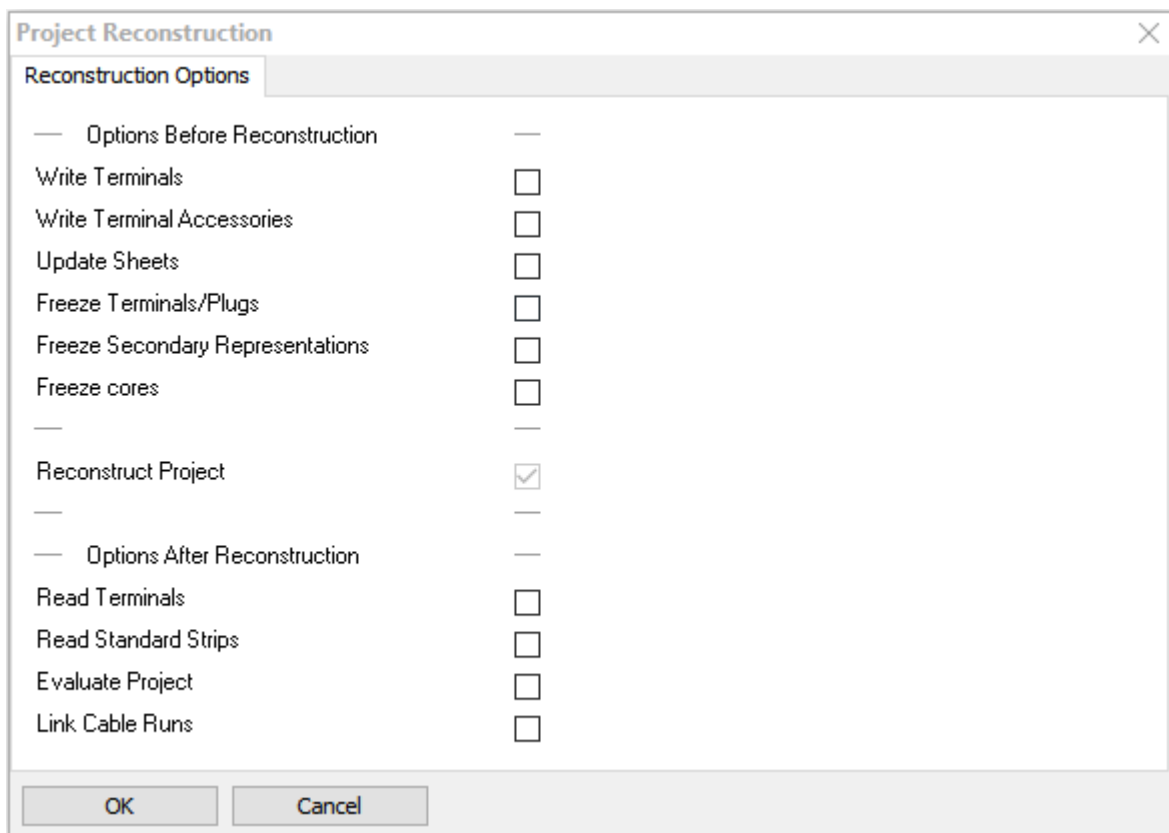
## 1.1 New in Project Editing

### 1.1.1 Freeze Cores During Project Reconstruction

In the context of project reconstructions, ELCAD/AUCOPLAN 2018 allows you to freeze the cores before the reconstruction. For this purpose, the option **Freeze Cores** has been added to the project reconstruction dialog.

With this option, the core designations will be set to Manually Assigned to ensure that they will be preserved in the context of a new evaluation.

This option is only available if the cable management has been activated beforehand.



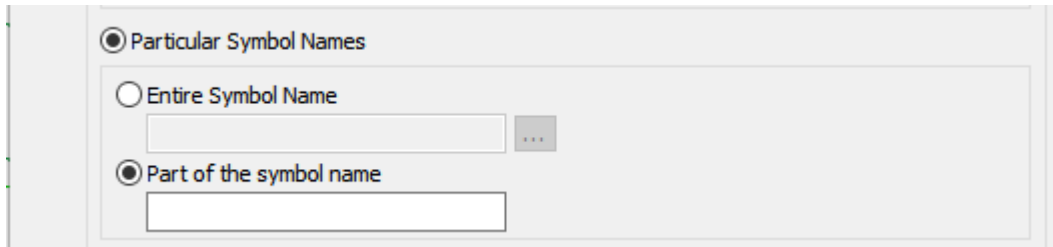
The screenshot shows the 'Project Reconstruction' dialog box with the 'Reconstruction Options' tab selected. The dialog is divided into three sections: 'Options Before Reconstruction', 'Reconstruct Project', and 'Options After Reconstruction'. Each section contains a list of options with corresponding checkboxes. The 'Reconstruct Project' option is checked.

Options Before Reconstruction	
Write Terminals	<input type="checkbox"/>
Write Terminal Accessories	<input type="checkbox"/>
Update Sheets	<input type="checkbox"/>
Freeze Terminals/Plugs	<input type="checkbox"/>
Freeze Secondary Representations	<input type="checkbox"/>
Freeze cores	<input type="checkbox"/>
Reconstruct Project	
Reconstruct Project	<input checked="" type="checkbox"/>
Options After Reconstruction	
Read Terminals	<input type="checkbox"/>
Read Standard Strips	<input type="checkbox"/>
Evaluate Project	<input type="checkbox"/>
Link Cable Runs	<input type="checkbox"/>

At the bottom of the dialog are 'OK' and 'Cancel' buttons.

### 1.1.2 Enhancement of the Function Replace Symbol Texts and Free Texts

The function dialog **Extras / Replace Symbol Texts and Free Texts** has been enhanced in ELCAD 2018 by the filter option **Particular Symbol Names**.



The option **Entire Symbol Name** allows you to limit the replacement of texts to symbols of which you know the full name.

Select the option **Part of the symbol name** and enter the part of the symbol name that is equal in case you want to limit the selection to several symbols which have a specific text part in common.

### 1.1.3 Structured Storage of External, Project-related Documents

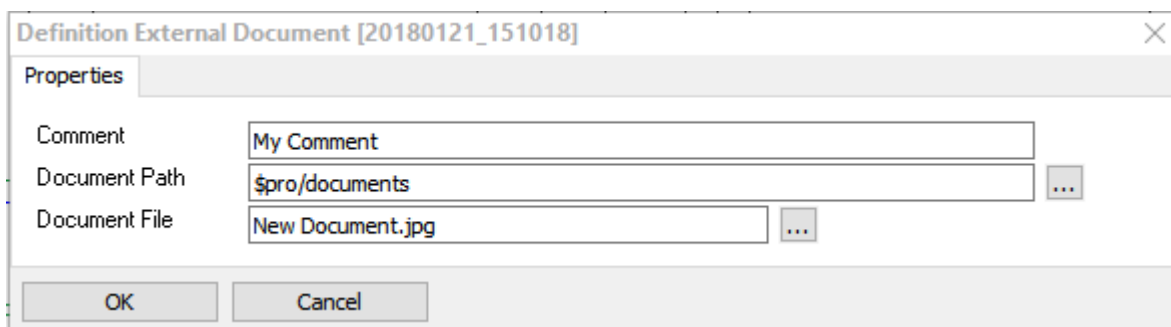
To improve the clarity and visibility when using external documents, the program functionality has been changed in ELCAD 2018 in a way that external files will no longer be stored directly in the project directory, but in a specifically created sub-folder named **DOCUMENTS**.

This adjustment has an impact on the following program functions:

- The selection of external documents in the graphic representation
- Tabular processing
- Management via the tree **External Documents**

On inserting a new external file, a query will be displayed asking you whether the file is to be copied into the project directory. If you confirm this query, the document will be copied into the sub folder **DOCUMENTS** of the project.

For a verification, click the file with the right mouse button and select **Properties** in the context menu. In the document path, the folder **\$pro/documents** is now also displayed.

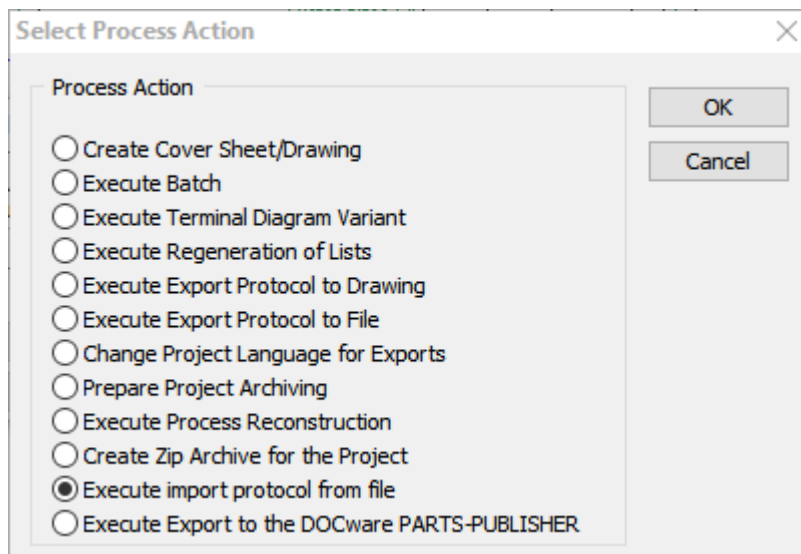


## Archiving documents

If you have specified that for archiving, documents stored outside of a project are to be archived as well, these external documents will be copied into the sub folder **DOCUMENTS** during the archiving process. At the same time, all references to these files will also be adjusted to the sub folder \$pro/documents.

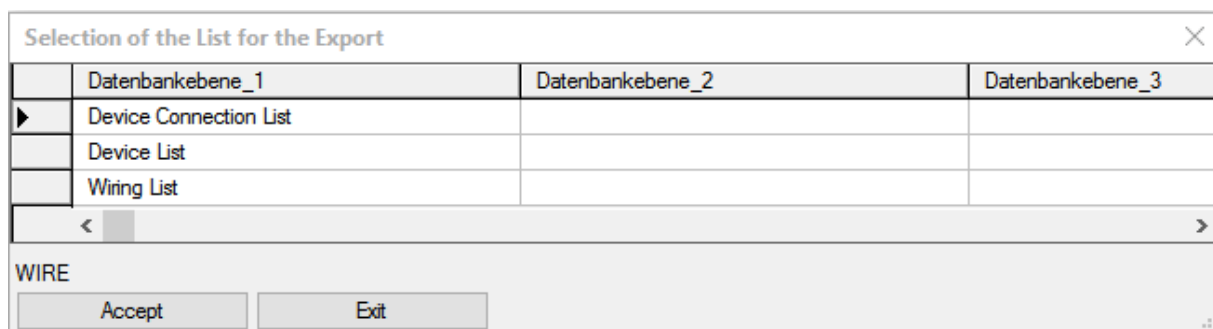
### 1.1.4 New Process Function Execute Import Protocol From File

As an enhancement of the process functions, ELCAD/AUCOPLAN 2018 provides you with a new process action: **Execute Import Protocol From File**.

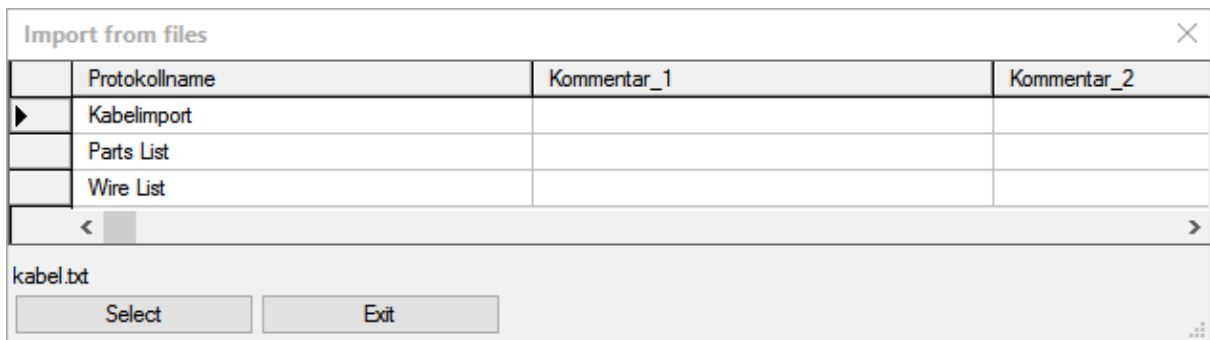


You may select this new process action during the process definition. This new function allows automated data imports from external files into lists by means of import protocols.

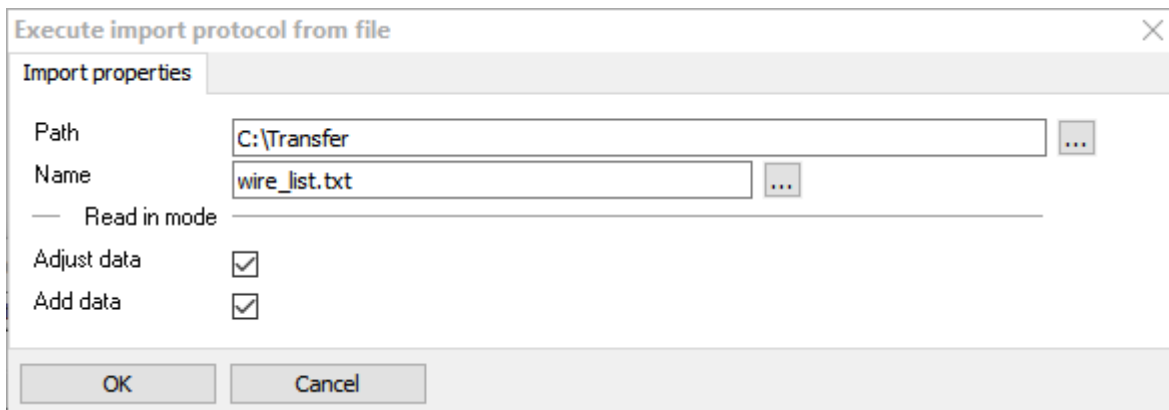
If more than one list is available for a list type for which an import protocol has been defined, you will first have to specify the list into which the data of the external files is to be imported.



In the subsequent dialog, all import protocols that are available in the project will be offered for selection.

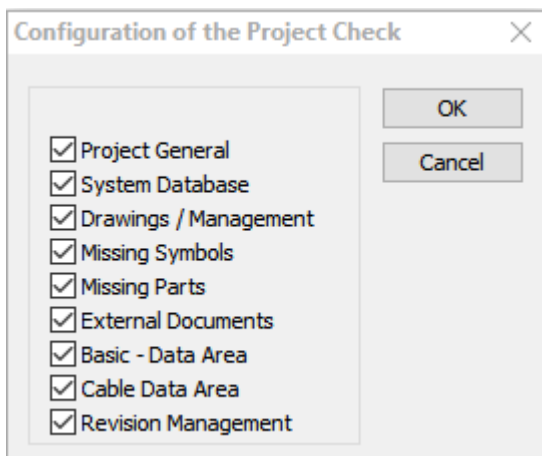


After having selected the import protocol, you will then have to define the path, the file name and the import mode for the import and confirm the dialog.



### 1.1.5 The Project Check Verifies the Storage of External Documents

The verification of external documents via the project check **Extras / Services / Project Check** has been changed. ELCAD 2018 will now report all references which are not located within the project directory. In this context, the text has also been adapted.

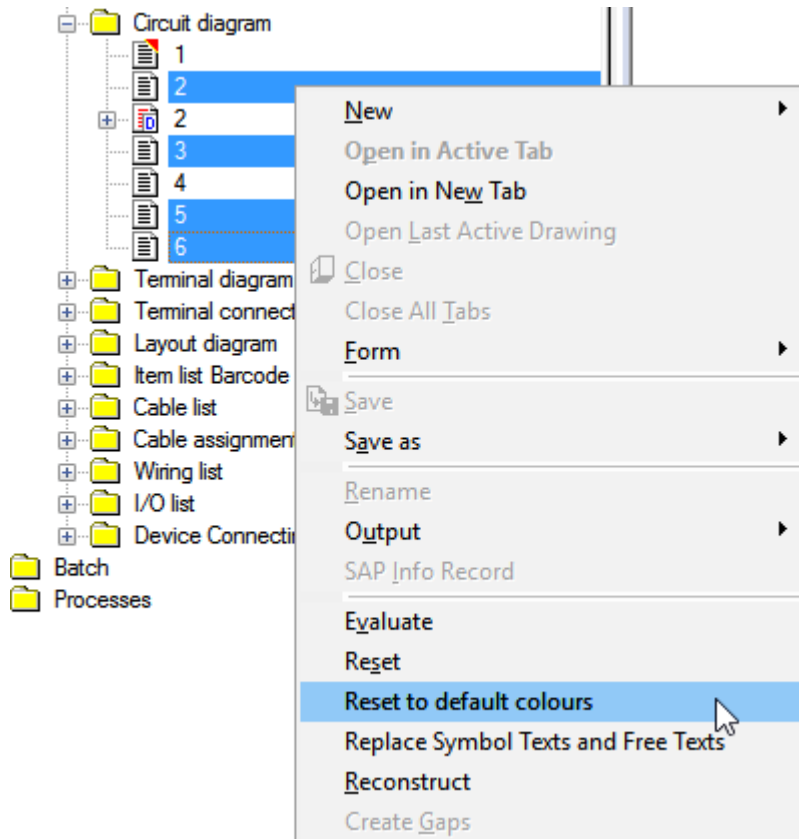




### 1.1.6 New Tree Functionality: Reset to Default Colours

In ELCAD/AUCOPLAN 2018, you may undo your individual colour assignments and reset the drawings to the default colours via the context menu of the right mouse button in the drawings tree. Resetting the colours will once again enable the ELCAD default colours.

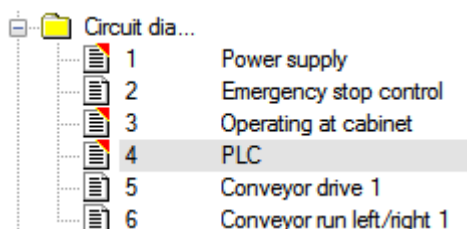
This action can be carried out on individual drawings, folders or marked drawings.



### 1.1.7 Transfer Markings at Drawings During Copying

On copying drawings in the drawings tree, ELCAD/AUCOPLAN 2018 will also transfer the markings of the copied sheets into the target project.

This applies to sheets marked by placing marking symbols as well as to sheets marked via the drawings tree.



If you prefer to retain the previous program behavior, you can deactivate this new functionality by means of the following switch:

[Automatic]

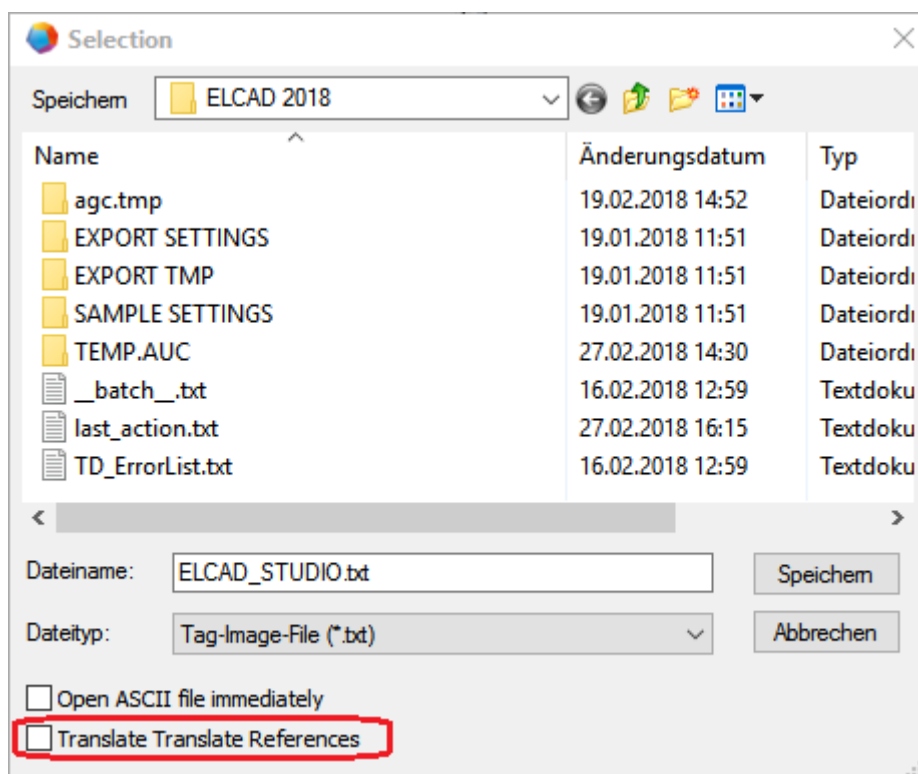
SheetCopyWithMarkInfo=0

### 1.1.8 Translate the Translate References in the ASCII Output

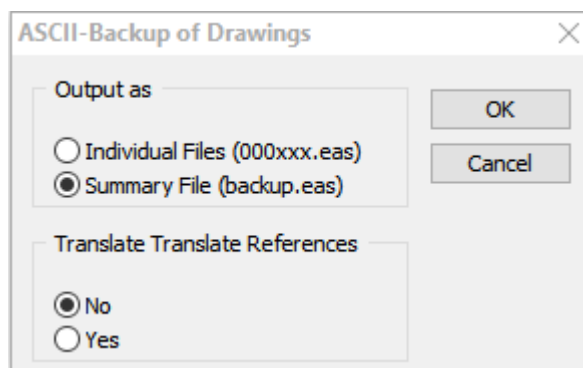
ELCAD/AUCOPLAN 2018 offers you a new option for the ASCII output of drawings and symbol libraries. On using this new option, the translate references will be replaced by the fixed texts of the configured languages during the ASCII output.

Translating translate references has been added to the following ELCAD/AUCOPLAN functions. For this purpose, you will find the setting **Translate Translate References** in the respective dialogs.

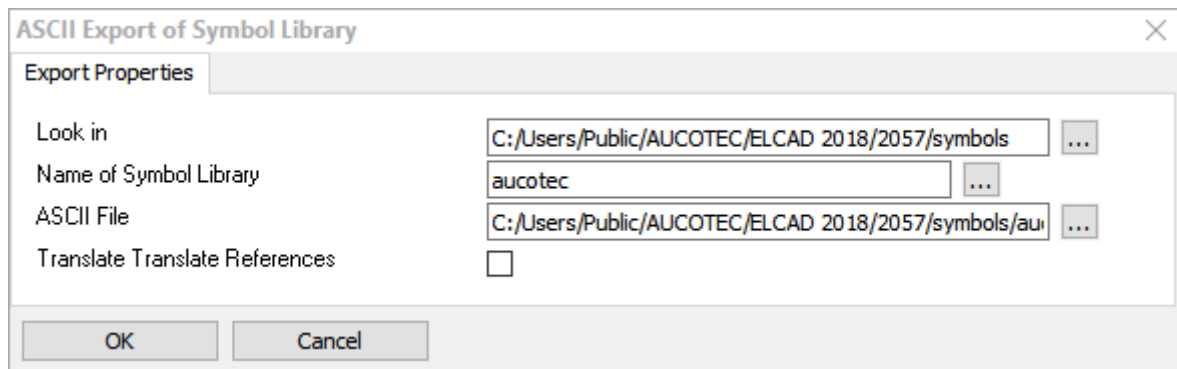
- In the drawings tree in the context menu on selected drawings under **Save as/ASCII**.



- In the main menu under **Extras/Services/ASCII-Backup of Drawings**.



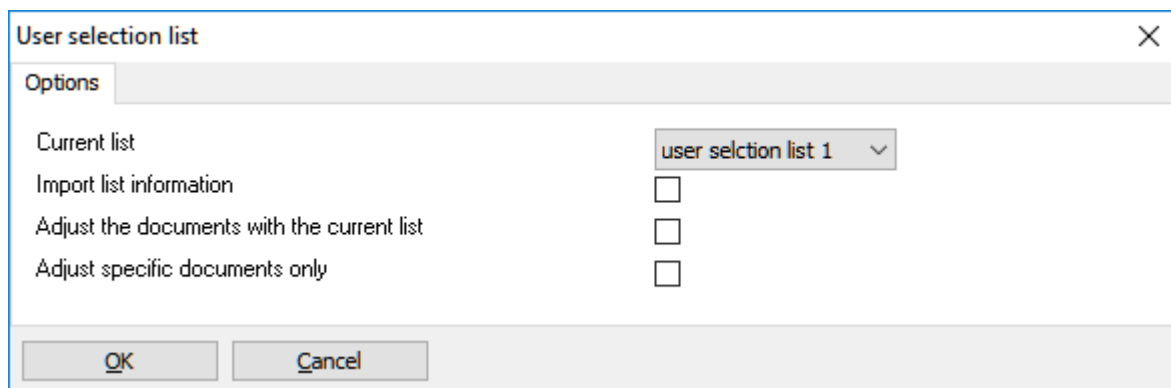
- In the symbol design under **File/Output/Library/Write ASCII**.



The default setting in all dialogs is to not translate the translate references.

### 1.1.9 Update Drawings with User Selection Lists

The functionality of the user selection lists has been enhanced in ELCAD/AUCOPLAN 2018 to also provide the option to directly update the documents during a new import of selection lists. For this purpose, the following dialog will be provided.



The dialog elements included therein have the following meaning:

<b>Current list</b>	Name of the selected user selection list
<b>Import list information</b>	If you check this option, the user selection list will first be imported anew from the external data. If you do not check this option, you may update the drawings using the current status of the selection list.
<b>Adjust the documents with the current list</b>	If you check this option, the documents of the project will be updated with the data of the selection list in a second run.
<b>Adjust specific documents only</b>	If you check this option, a drawing selection will be offered first to let you define which drawings are to be updated. If you do not check this option, all documents of the project will be updated with the data of the selection list.

## 1.2 New in Drawing Editing

### 1.2.1 Editing Main Representations Will Also Change Secondary Representations

With version 2018, all secondary representations of the symbol type 6 in projects of the type ELCAD will also be adjusted automatically during the renaming of evaluated main representations of the symbol type 5.

If a symbol of the type 5 is changed in graphical editing by changing its association to a location, a function or a plant, all previously associated symbols of the type 6 will also be renamed. Therefore, it is no longer necessary to manually change already assigned secondary representations.

This new functionality is also available when editing with transfer.

If you prefer to retain the previous program behavior, you can deactivate this new functionality by means of the following switch:

[Automatic]

RenameEditSymbolTyp5=0

### 1.2.2 Access to the ELCAD Studio Device Table During Editing

For projects of the type ELCAD Studio or AUCOPLAN Studio, version 2018 enables you to access the ELCAD Studio device table on editing items (code numbers 4 and 8) and thus to select the item designation from there. On editing symbols of the symbol types 1, 5, 6, 10, 11 and 12, the dialog **Data Selection and Filter** will now be provided as a first step.

Name_of_the_data_field	Search Text	Operator
HigherLevelDesign		...
Function		...
ItemDesignation		...

If you confirm this dialog by clicking OK, the subsequent data selection will be carried out using the ELCAD Studio device table.

This new functionality is active on editing in the drawing editing mode and on editing the ELCAD Studio device table via the button [...].

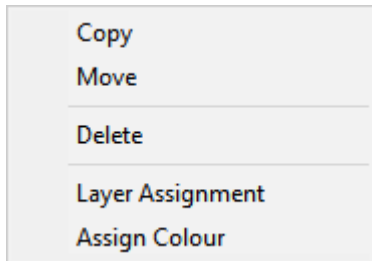
If you prefer to retain the previous program behavior, you can deactivate this new functionality by means of the following switch:

[ElcadStudio]

OldSelectFunction=1

### 1.2.3 Extension of the Context Menu in Drawing Editing

In the drawing editing of ELCAD/AUCOPLAN 2018, the editing context menu has been extended. First of all, the two functions **Layer Assignment** and **Assign Colour** have been added.



Moreover, while it only was possible to re-edit items via a window of the right mouse button if the selected window contained any symbols, you may now also start to re-edit items with the current version if the window contains the following graphic elements:

- Rectangles
- Circles
- Lines
- Ellipses
- Connections
- Dimensionings
- Texts

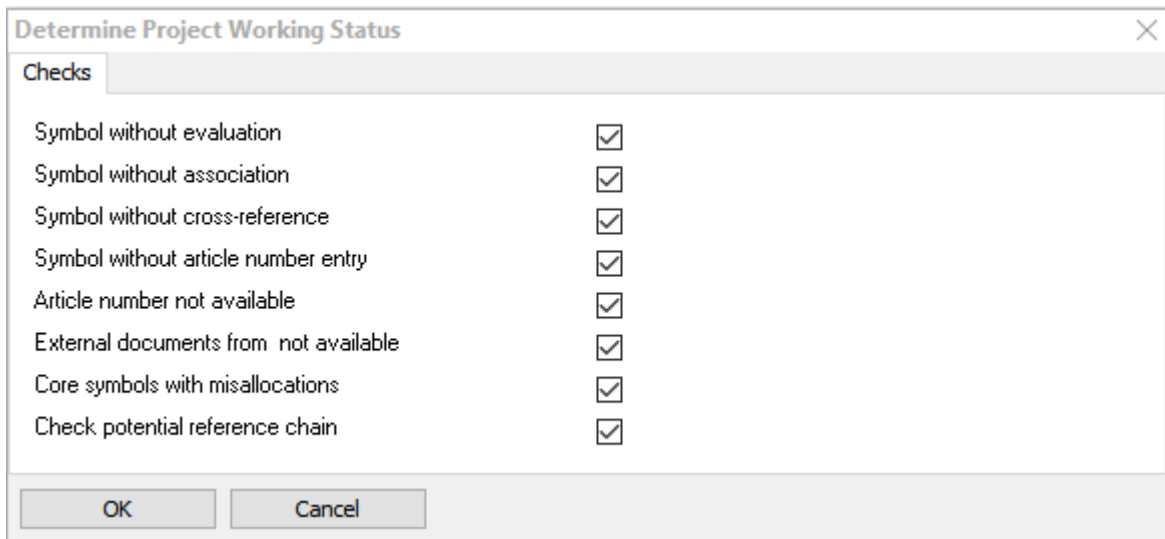
By means of the context menu, you can not only copy, move and delete the graphic elements, but you may also assign colors or a layer to them.

## 1.3 New in List Editing

### 1.3.1 New Check of Potential Reference Chains in Status Lists

Checking potential references chains manually is very time-consuming, especially in complex projects. Because of that, ELCAD/AUCOPLAN 2018 now offers you a new, automated check.

In the view **Lists / Status lists**, ELCAD/AUCOPLAN provides you with the new check option **Check potential reference chain** which is available in the status list **Working Status**.



If potential chains on the same drawing refer to each other instead of to another drawing, or if sheet A refers to sheet B and sheet B then refers back to sheet A, a data set of the type Error will be created in the working list Working Status. In doing so, the message Potential chain not sequential is entered.

### 1.3.2 Information on Marked Drawings in the Table of Contents

In ELCAD/AUCOPLAN 2018, the information whether drawings are marked in the tree or whether there are any marking symbols on them can be incorporated into the table of contents.

As a prerequisite, the structure of the parts lists must contain the code number 5000 (sheet number). Moreover, at least one of the following code numbers that are used for markings must be available in the structure of the list.

5036	Marking comment 1
5037	Marking comment 2
5038	Marking done by
5039	Marking date

If the prerequisites are met, the fields will be filled automatically on creating or regenerating a parts list.

### 1.3.3 The Wiring List Uses the Structure That Has Been Defined in the Settings

In ELCAD/AUCOPLAN 2018, the list structure for the creation and regeneration of wiring lists will always be created as you have defined in the options under **Lists / Wiring List**. If additional system attributes are needed, they will be added after the attributes that have been defined by you. This eases a simple formatting of the outputs.

If you prefer not to use this program behavior, you can reactivate the previous functionality for users or projects via the following switch:

[WiringList]

UseOldWiringListFunction=1

## **1.4 New in ELCAD/AUCOPLAN Studio**

### **1.4.1 Automatic Alignment Between ELCAD/AUCOPLAN Studio Tables and Form Sheets / Window Symbols**

ELCAD Studio 2018 allows you to define comments for plants, functions and locations during graphic editing by making entries into form sheets and window symbols of the types 11 and 12. During the evaluation, they will then be transferred into the tables of ELCAD/AUCOPLAN Studio in case they have not already existed there beforehand. Should there already be entries in the ELCAD/AUCOPLAN Studio tables, these central entries prevail.

Moreover, it has been realised in version 2018 that after comments of plants, functions and locations have been altered, the updated comments will be transferred to form sheets and window symbols of the types 10 and 11 on opening a drawing. Thus, central changes will now also become visible in the drawings.

If you prefer not to use this program behavior, you can reactivate the previous functionality for users or projects via the following switch:

[ElcadStudio]

NoNewUpdateWindowSymbols=1

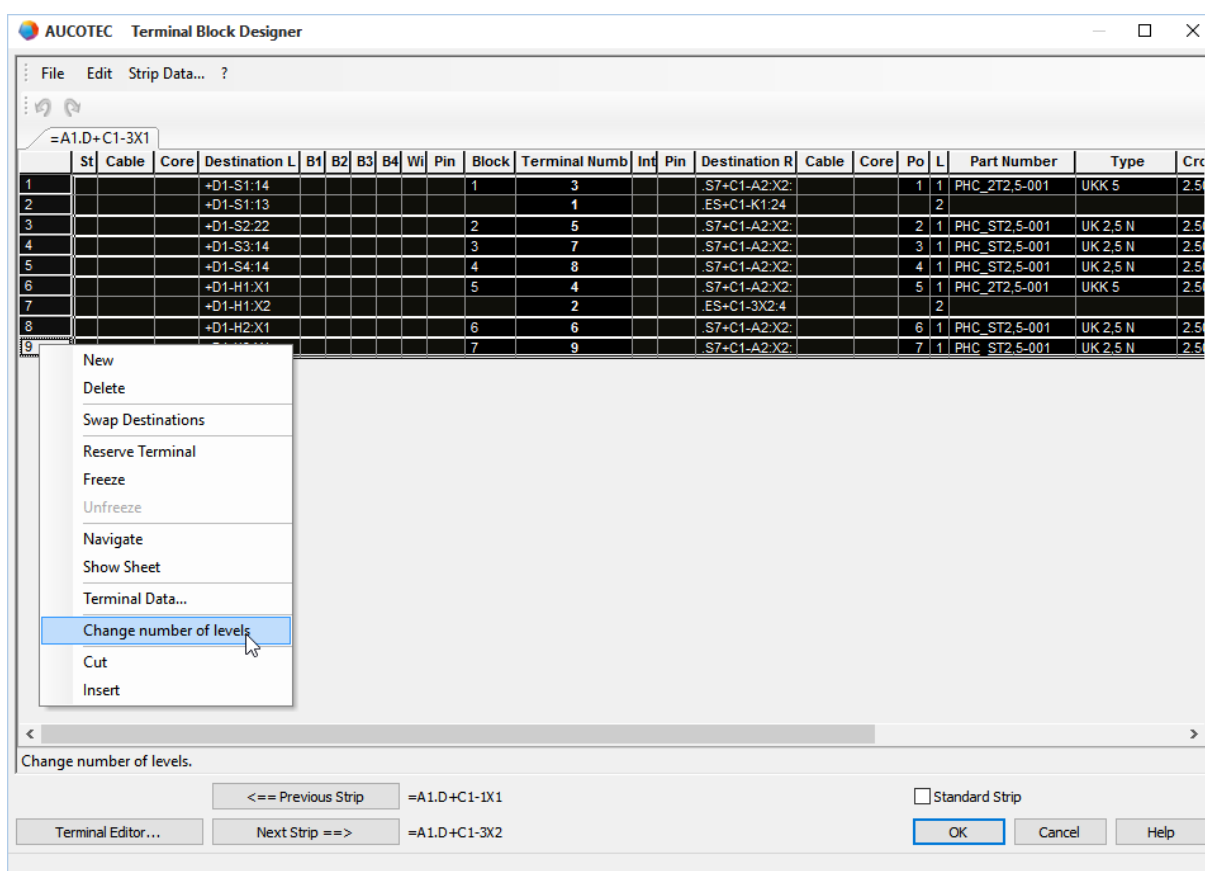


## 1.5 New in the Terminal Block Designer

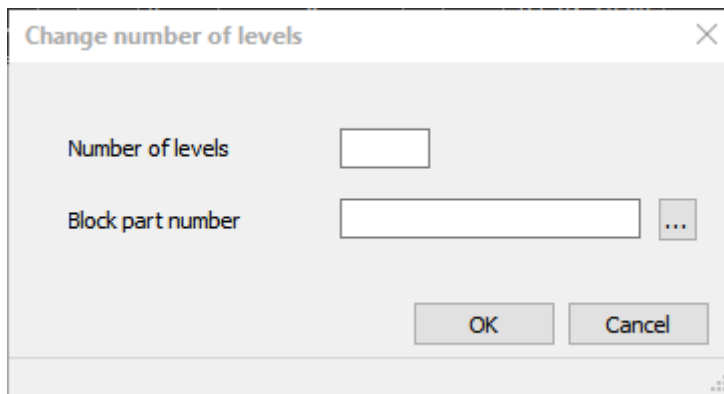
### 1.5.1 Conversion of Existing Terminals Into Multi-level Terminals

In ELCAD/AUCOPLAN 2018, a new important function is offered in the Terminal Block Designer. If you notice that the available space will not be sufficient, you will now be able to easily convert the terminals of a terminal block to other terminal types (e.g. multi-level terminals).

1. In the Terminal Block Designer, mark the terminals that you want to convert to, for example, multi-level terminals. Then, right-click on them.
2. In the subsequent dialog, select the menu item **Change number of levels**.



3. Then, define the number of levels in the subsequent dialog **Change number of levels**.
4. After that, you may enter the part number of the new terminals or select it from the device master data by means of the button [...].
5. Confirm your selection by clicking OK to apply the changes.



By entering the new part number, an alignment between the device master data and the Terminal Block Designer will be carried out to automatically take over further data such as type and cross-section.

If the number of marked terminals is not divisible by the number of new terminals without remainder, for example in case you want to convert seven single-level terminals into two-level terminals, the next highest number of multi-level terminals will be created with some terminals remaining empty. Empty terminals will automatically be assigned with the terminal designation **Terminal**.

By means of the same function, it is of course also possible to reconvert multi-level terminals back to terminals with fewer levels or simple series terminals.

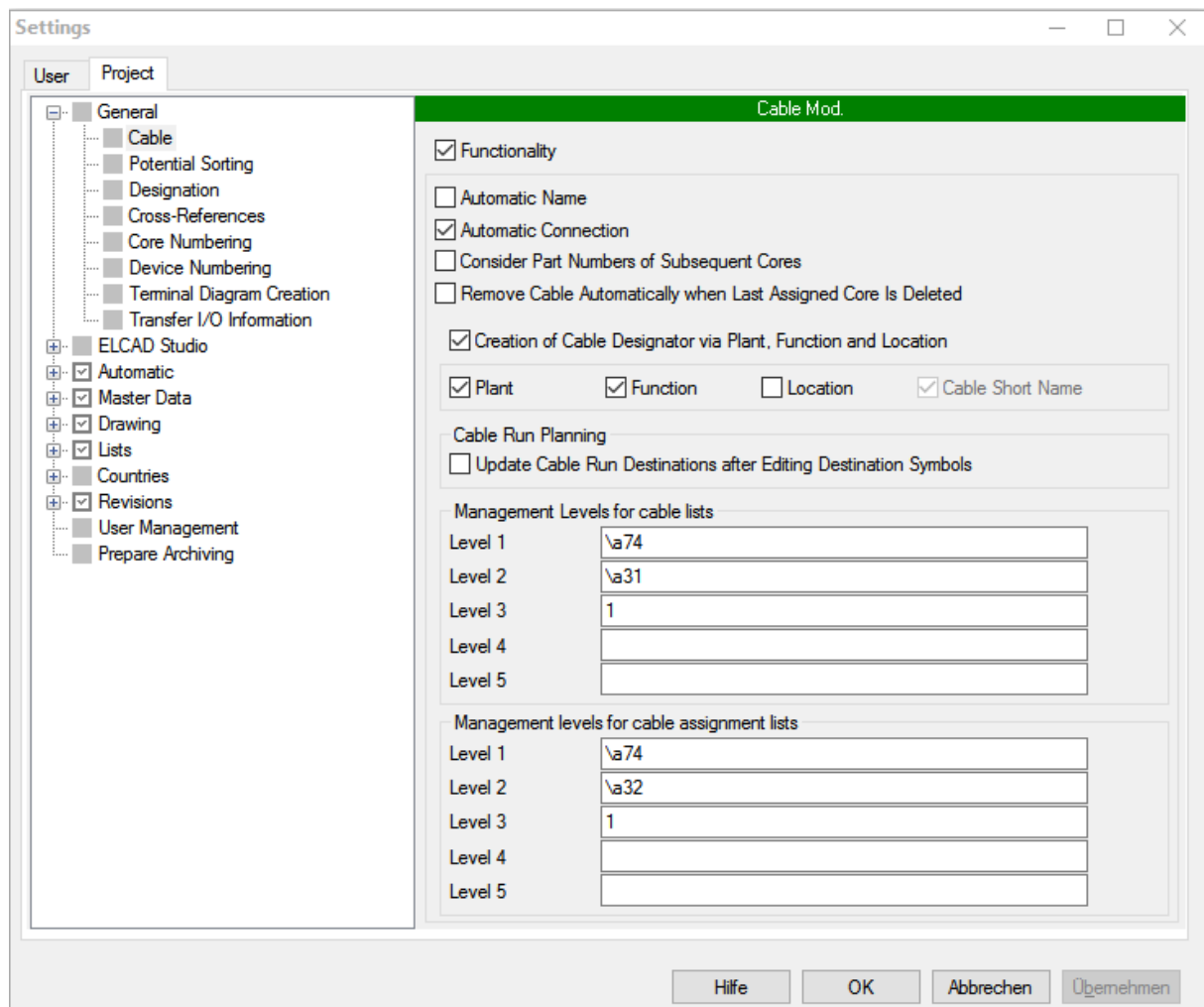
## 1.6 New in Cable Editing

### 1.6.1 New Settings for Cable Lists and Cable Assignment Lists

In ELCAD/AUCOPLAN 2018, you may now define via central project settings under which folder designations the drawings of the type cable lists and cable assignment lists will be stored in the drawings tree in the project.

Up to now, these settings were stored user-related. This enabled different users in the project to use differing views for cable lists and cable assignment lists.

To standardize these settings for a project, open the settings via **Extras / Options** and select the tab **Project**. The settings of the management levels for cable lists and cable assignment lists are at your disposal in **General / Cable**.

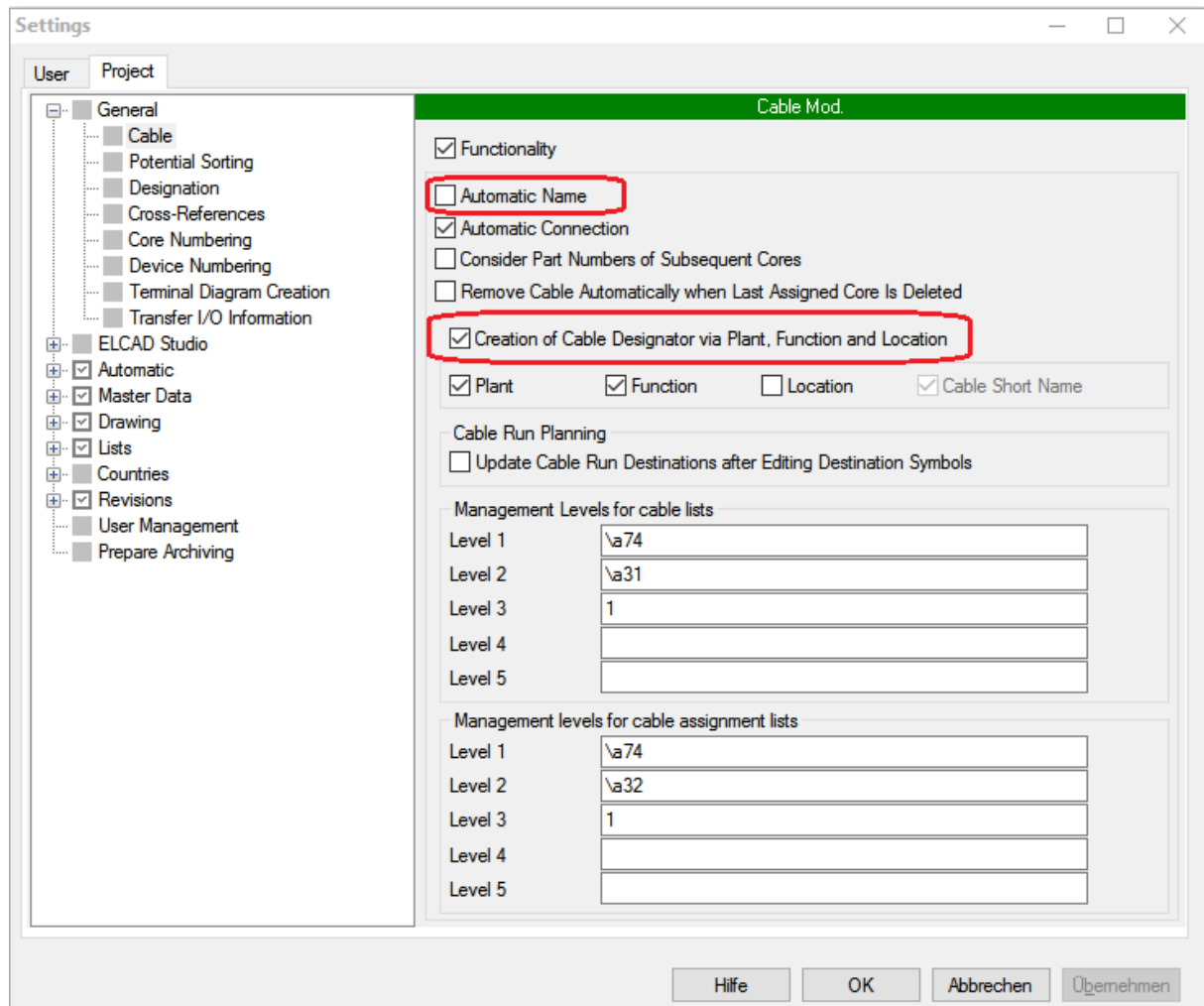


Click **Apply** to save the settings. These settings will then be the same for all users of the project.

### 1.6.2 New Conventions for the Automatic Generation of Cable Designations

In the options of the cable module, under **Settings/General/Cable**, you have the possibility to have the cable designations generated automatically by ELCAD in the following cases.

An additional option allows you to have the cable designations composed of plant, function and location.



Up to today, if both options were activated at the same time, the automatically generated designations could become long and confusing.

In ELCAD/AUCOPLAN 2018, the conventions of the designator generation have therefore been changed for the case that the options **Automatic Cable Name** and **Creation of Cable Designator via Plant, Function and Location** are both marked at the same time.

- The plant designation, the function and the location of the drawing on which the cable symbol is displayed will now be used for the composition of the designator (e.g. =A1.PS-W\$1).
- As an indicator that the designation was generated automatically, ELCAD inserts a "\$" character into the cable short name (e.z. -W\$1).

- If several cables are generated automatically for the same combination of plant designation, function and location, the cable short name will be incremented (e.g. -W\$1, -W\$2, -W\$3).

If both options are activated at the same time, a new cable will be created automatically in the following cases:

- If the user has entered nothing in the cable short name of the core symbols (code number 365).
- If the user entry in the cable short name of the core symbol (code number 365) refers to an existing cable, but the target information of the existing cable contradicts the target information of the core.

## **1.7 New in the Interfaces**

### **1.7.1 New Version of the WAGO smart Designer Interface**

In ELCAD/AUCOPLAN 2018, the export and import of terminal data to the WAGO smart Designer has been adapted to the current version 2.6.