

ELCAD/AUCOPLAN 7

New Features of Versions 7.6.0 and 7.7.0

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Contents

| | | |
|----------|---|-----------|
| 1 | New Features of ELCAD/AUCOPLAN 7.6.0 and 7.7.0..... | 1 |
| 1.1 | General Innovations | 2 |
| 1.1.1 | Status Boxes with Residual Runtime Display | 2 |
| 1.1.2 | Advanced Tiff Import – Generating Projects from Scanned Tiff Files..... | 3 |
| 1.1.3 | Simplified Access to Online Documentation..... | 5 |
| 1.1.4 | Pre-allocating Project Settings as Standard | 5 |
| 1.2 | New Features in Drawing Editing | 6 |
| 1.2.1 | Unicode Texts in the Symbol Mask..... | 6 |
| 1.2.2 | Navigating from Cores into the Tree | 6 |
| 1.2.3 | Selecting PLC Operands During Drawing Editing..... | 7 |
| 1.2.4 | Extended Test Functions for Drawings | 8 |
| 1.2.5 | Representing Locations Graphically..... | 9 |
| 1.2.6 | Exporting Inserted Images | 9 |
| 1.2.7 | Representation of Theta Sign (θ) as Technical Symbol in Drawings..... | 10 |
| 1.2.8 | Keeping the Filter Settings in the Symbol Selection Dialog | 11 |
| 1.2.9 | Adjustable Angular Offset of Connections..... | 12 |
| 1.2.10 | Code Number 4020 Extended..... | 12 |
| 1.2.11 | Exchange Symbols with Connector Reduction | 13 |
| 1.3 | New Features in Project Editing..... | 14 |
| 1.3.1 | Revision of Lines, Rectangles and Circles | 14 |
| 1.3.2 | Extension of the Project History | 15 |
| 1.3.3 | Extended Search in the ELCAD Trees | 16 |
| 1.3.4 | Editing Server Projects in the Read-only Mode | 17 |
| 1.3.5 | Storing all Error Messages in the Error List..... | 18 |
| 1.3.6 | Outputting Drawings to ASCII Directly in the Tree..... | 19 |
| 1.3.7 | Concatenation of the Potential Designators According to IEC 61346..... | 19 |

| | | |
|------------|--|-----------|
| 1.3.8 | Storing and Pre-allocating the Destination of File Outputs | 20 |
| 1.3.9 | New Options in Project Reconstruction..... | 20 |
| 1.3.10 | Project Tools | 21 |
| 1.3.11 | Navigate from List Editing Directly to Drawing Editing..... | 21 |
| 1.3.12 | Opening Drawings in New Tabs During Navigation..... | 22 |
| 1.4 | New Features in List Editing..... | 23 |
| 1.4.1 | Multiple Protocol Export to Drawings..... | 23 |
| 1.4.2 | Conversion of the # Character During List Export..... | 23 |
| 1.5 | New Features in Terminal Editing | 24 |
| 1.5.1 | Navigation from the Terminal Diagram to the Drawing..... | 24 |
| 1.5.2 | Unfreezing Terminal Numbers in the Item Editor | 25 |
| 1.5.3 | Extension of the Terminal Block Designer..... | 26 |
| 1.5.4 | Specifying Entries for Block-related Terminal Diagrams | 26 |
| 1.6 | New Features in Cable Editing | 27 |
| 1.6.1 | Creating the cable list from the Item tree..... | 27 |
| 1.7 | New Interface Features..... | 28 |
| 1.7.1 | Extensions in the Adoption of Existing Data into Engineering Base | 28 |
| 1.7.2 | Outputting Compact PDF Files with the Project Designation ... | 28 |
| 1.7.3 | Specifying the DXF Export like the Printer Output..... | 29 |
| 1.7.4 | Support of the Steinhauer eCAB Workcenter..... | 30 |
| 1.7.5 | DOCware Output as EDM Function..... | 30 |
| 1.7.6 | Handling Copy Errors in the Generating Interface | 31 |

1 New Features of ELCAD/AUCOPLAN 7.6.0 and 7.7.0

With ELCAD/AUCOPLAN 7.5.x we had focused on the compatibility with current operating systems (Windows 7 and Windows Server 2008) as well as the adoption of existing data from Engineering Base and the transfer to DocWare Parts Publisher. With the development of the versions 7.6.0 and 7.7.0, the focus was on the extension of the usability and the simplification of the daily design work.

For this purpose AUCOTEC has again analyzed your requests and has put together many of these points in the versions 7.6.0 and 7.7.0. With the current versions many editing steps become even more efficient, and the operation becomes even easier.

As always, the main focus of all extensions is on the compatibility of your data and easier handling.

The present list includes all 7.6.0 functions and the functions already implemented in version 7.7.0.

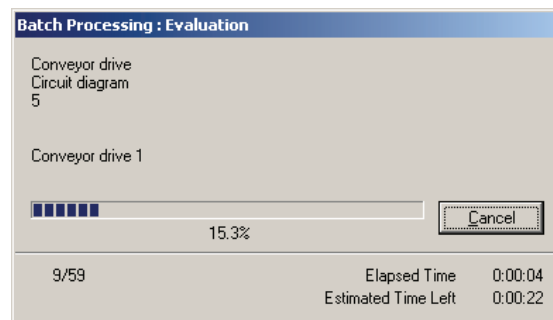
1.1 General Innovations

1.1.1 Status Boxes with Residual Runtime Display

ELCAD offers status boxes for all actions that run over a longer period of time. With ELCAD 7.6.0 you now get a status box that tells you the probable residual runtime of the action.

You get information about

- The elapsed runtime
- The estimated runtime left
- The percentage already finished
- A counter with the total number of objects and information on which object the program is currently dealing with.



1.1.2 Advanced Tiff Import – Generating Projects from Scanned Tiff Files

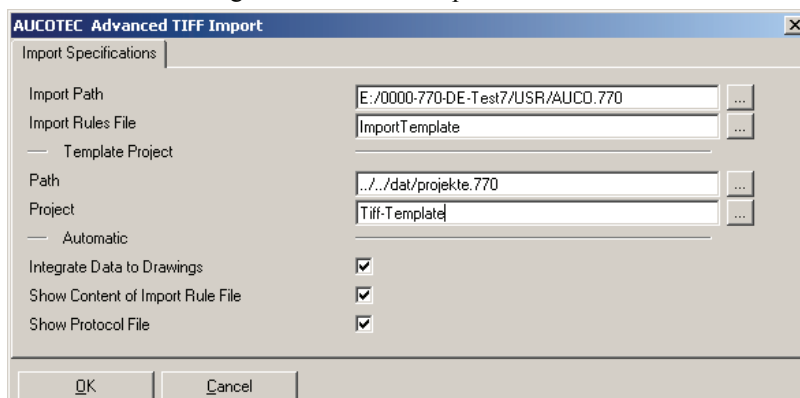
With ELCAD 7.7.0, a solution is offered to read in old data stocks (printed documentation) from scanned Tiff files and to generate projects with this data. Thus it becomes easy for you to adopt documentation that hitherto was only available in printed form into your electronic data processing and archiving jobs. After read-in you can also carry out graphic modifications and add supplements. This "Advanced Tiff-Import" solution requires a separate license. A predecessor version of this solution was up to now available as the add-on solution ELCAD Hybrid.

With the Advanced Tiff import you can import all Tiff files of a folder into your project if you do not need individual assignments of properties to individual drawings (multi-import). With this method the definition of the import rule file is quite simple, the sheet number in the last level is simply incremented. With this automated incorporation it is possible to incorporate a large number of scanned documents into ELCAD/AUCOPLAN with little effort.

If you want to assign single sheets individual properties such as form symbol, drawing name, drawing number, plant, function, location, sheet comment or other technical attributes, you can do this by using a more complex import rule file that specifies the future properties for each TIFF file.

Prerequisites for the import

1. To begin with specify a template project where you can store the forms and form specifications as templates in empty drawings. This project should contain empty drawings with filled-out administrative entries in the form sheets, which are then used as templates for the import of the Tiff files.
2. Then create a new project for reading in the Tiff drawings into which you can import the drawings.
3. Your user directory contains two examples of import rule files under the name "Tiff-Import-Template.xls" or "Tiff-Import-Template-Multi.xls". You can use these files to view the settings for the Tiff import in exemplary form or to redefine them for your purposes. Copy one of the rule files into the directory with the scanned Tiff files and modify it there (see below).
4. Start the function in ELCAD with closed graphics under EXTRAS / SERVICES / ADVANCED TIFF IMPORT.
5. Fill out the dialog "Advanced Tiff import" and start the function with [OK].



Settings in the import rule file

Multi-import

For the multi-import use wildcards (*.tif) for the image file in column A and use a line to specify the details of the import (line 1) of a complete folder with drawings.

| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P |
|---|-------------------------|---------------|---------|----|----|----|----------|------|-----|-----|-----|--------------------|-----|-----|-----|------|
| 1 | Image | E1 | E2 | E3 | E4 | E5 | NE1 | NE2 | NE3 | NE4 | NE5 | 65 | 1 | 2 | 3 | 111 |
| 2 | E:\Scanned\import*.tif | Tiff-Template | Drawing | 1 | | | Imported | Tiff | 1 | | | Control Version 1C | =A1 | .F1 | +E1 | FFF1 |
| 3 | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | |

Single import

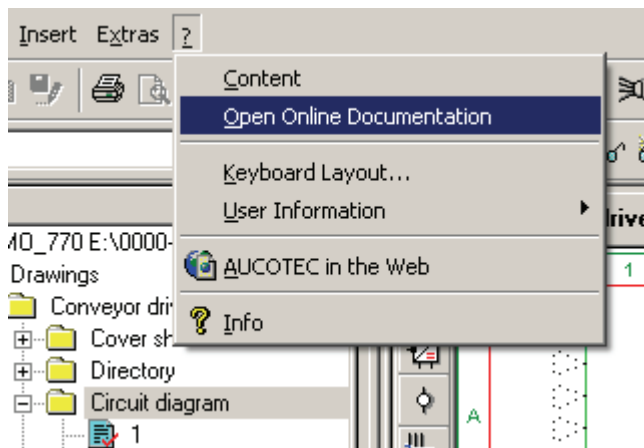
For an individual import job you can assign each Tiff file an individual template drawing (columns B to F), an individual drawing designation (columns G to K) and can make assignments for plant, function and location (columns M to O) as well as additional ELCAD code numbers.

| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P |
|---|-------|----------|----|----|----|----|--------|------|-----|-----|-----|----------------|-----|-----|-----|------|
| 1 | Image | E1 | E2 | E3 | E4 | E5 | NE1 | NE2 | NE3 | NE4 | NE5 | 65 | 1 | 2 | 3 | 111 |
| 2 | 1.tif | Template | 1 | | | | Import | Scan | 1 | | | Import of tif1 | =A1 | .F1 | +E1 | FFF1 |
| 3 | 2.tif | Template | 2 | | | | Import | Scan | 2 | | | Import of tif2 | =A2 | .F2 | +E2 | FFF2 |
| 4 | 3.tif | Template | 2 | | | | Import | Scan | 3 | | | Import of tif3 | =A3 | .F3 | +E3 | FFF3 |
| 5 | 4.tif | Template | 1 | | | | Import | Scan | 4 | | | Import of tif4 | =A4 | .F4 | +E4 | FFF4 |
| 6 | 5.tif | Template | 3 | | | | Import | Scan | 5 | | | Import of tif5 | =A5 | .F5 | +E5 | FFF5 |
| 7 | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | |

For AUCOPLAN projects and ELCADStudio projects, the form sheet data is evaluated with respect to plant, tag / function and location, and the corresponding objects are created in the database. Thus it is possible to manage the documents in relation to objects.

1.1.3 Simplified Access to Online Documentation

In the section of the ELCAD online help you find a new menu item OPEN ONLINE DOCUMENTATION. This directly opens the ELCAD Help folder and offers you all ELCAD operation manuals as electronic documents (PDF) for opening.



1.1.4 Pre-allocating Project Settings as Standard

Many users who work with frequently changing projects wanted the project settings to be the default settings in the options. With ELCAD 7.7.0 you can specify whether the user settings or the project settings are activated as standard in the options.

If you wish the tab for the project settings to be permanently open, then set the following INI switch in the aucotec.ini:

```
[System]
```

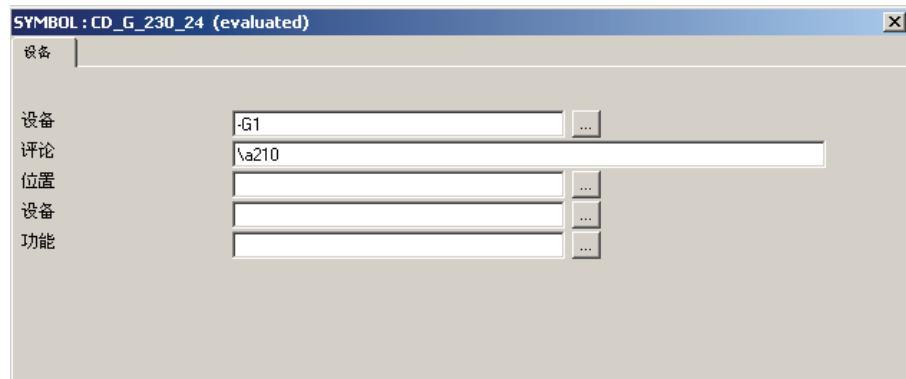
```
ProjectIniIsDefaultPage=1
```

If the switch is set to 0 or not present, then ELCAD opens the options as before with the default user settings.

1.2 New Features in Drawing Editing

1.2.1 Unicode Texts in the Symbol Mask

After the object tree and the lists, another central ELCAD/AUCOPLAN element has been rendered Unicode capable with ELCAD 7.6.0. Thus you can now use translate texts and have them displayed in translated form also for the meaning and the tabs in the edit mask of Drawing Editing.



To do this, enter translate references under "Meaning" in the symbol design; these are then displayed in translated form according to the current translate setting.

| Dialogue editing | | | |
|------------------|------|---------|---------------|
| No. | Code | Meaning | Default Value |
| 1 | 1018 | \D856 | \D343 |
| 2 | 4 | \D343 | -G |
| 3 | 40 | \D583 | |
| 4 | 3 | \D393 | |
| 5 | 1 | \D298 | |
| 6 | 2 | \D465 | |

1.2.2 Navigating from Cores into the Tree

The navigation (function GOTO) from cores to the drawings to the object in the tree has been distinctly improved in version 7.7.0. For a non-evaluated core there appears first of all a message that the device has not yet been entered. The subsequent behaviour depends on the data.

If the code 362 is empty, the cable is opened in the tree and the first core is marked.

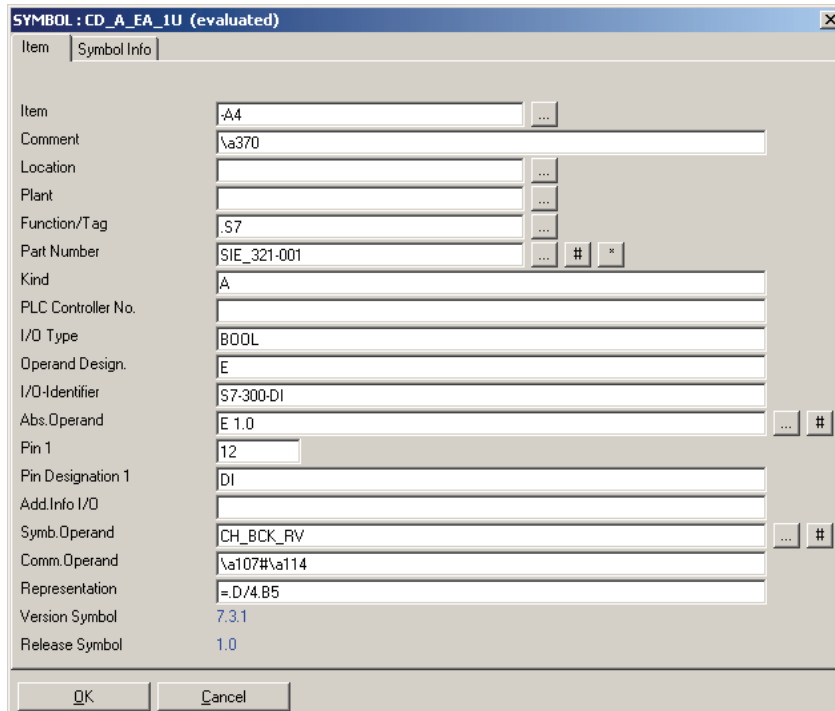
If the code 362 is filled and if there is an entry with the same name in the tree, then the cursor is placed on the core with the same name.

If the code 362 is filled but there is no entry with the same name in the tree, then the cursor is placed cable that is not opened.

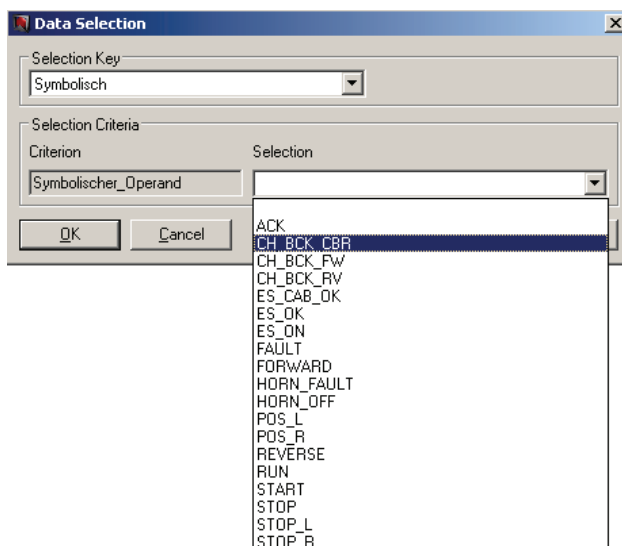
1.2.3 Selecting PLC Operands During Drawing Editing

With version 7.6.0 it is now possible to select the operands in PLC symbols during drawing editing. The selection accesses the predefined assignment list.

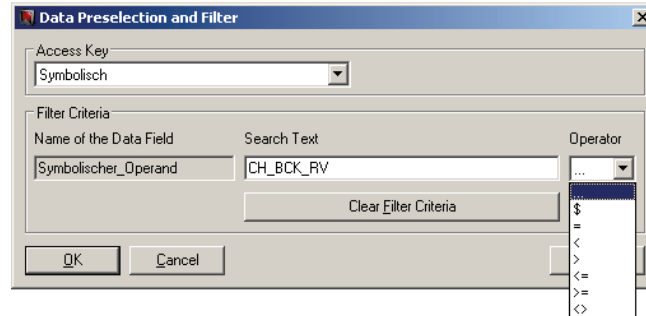
For the code numbers 12211 (absolute address) and 12212 (symbolic address) you get a selection button in the symbol editing dialog.



You enter the option via the [...] button using the S keys of the assignment list. Select an S key, and then select an item from the list of available operands in the field "Selection".



With the button [#], you can moreover also use a filter for the data selection.



This function supports only assignment lists of the PLC version >7.3.

1.2.4 Extended Test Functions for Drawings

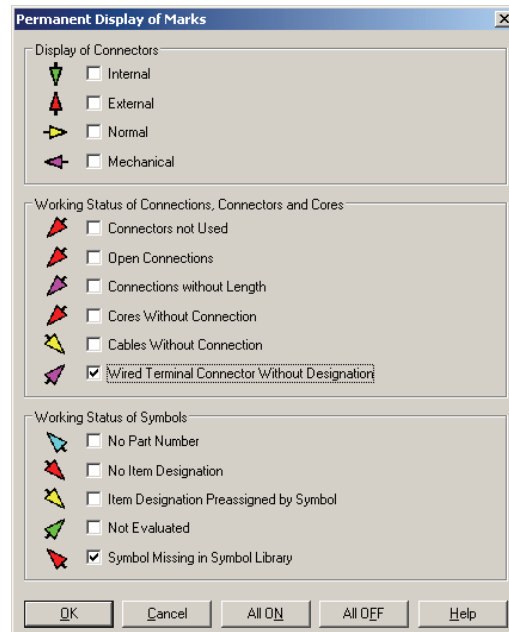
You can set test functions for drawings in the program interface; these functions have been extended by two new tests in version 7.6.0.

Symbols missing in symbol libraries

This function shows the reference points of symbols in a drawing that do not occur in the predefined symbol libraries and can therefore not be represented.

Wired terminal connector without designation

You can use this function to check whether it has been forgotten to assign a connector designation to terminals with the code 45. This test function was already available as separate command in the command line.



Moreover the display of the marking arrows has been modified so that they are no longer reduced in large drawing formats, thus remaining visible.

1.2.5 Representing Locations Graphically

With ELCAD 7.7.0 it is now possible to also graphically represent locations. This holds for the ELCAD project types that dispose of a location table:

- ELCAD Studio
- AUCOPLAN
- AUCOPLAN Studio

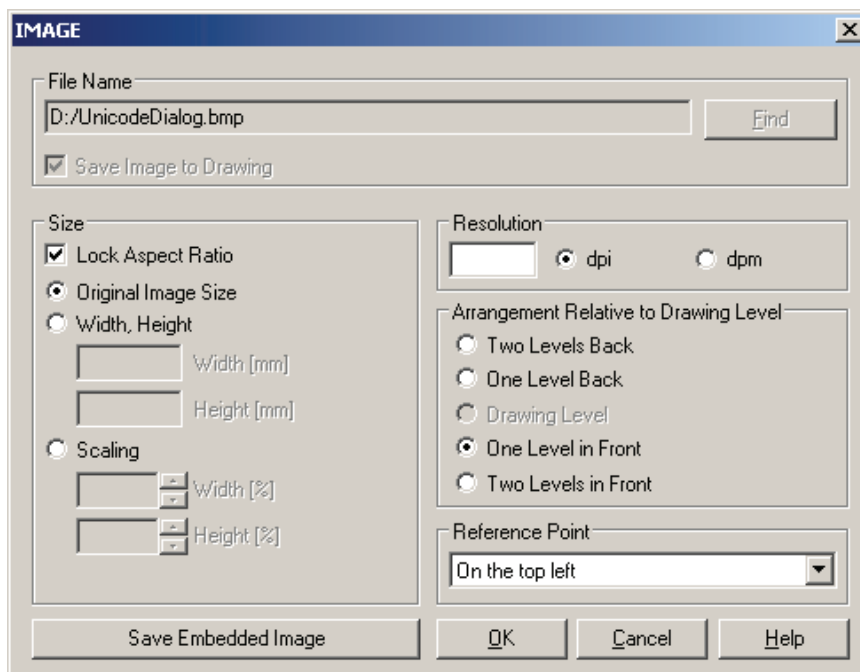
You can graphically display the location information in a symbol that is linked to the database and is automatically updated during subsequent project editing. Moreover you can represent all code numbers of the location table in this symbol. This can e.g. be used in layout drawings for marking a location whose change is automatically updated in the drawing.

The location symbol must be of the symbol type 2 and must contain the symbol class specification 15 in code number 1600.

1.2.6 Exporting Inserted Images

If you have inserted an image into a drawing and then find out that the original file is no longer accessible, you get with ELCAD 7.7.0 a simple option to re-export this image.

For this purpose edit the corresponding image in ELCAD and then select the button [Save Embedded Image].

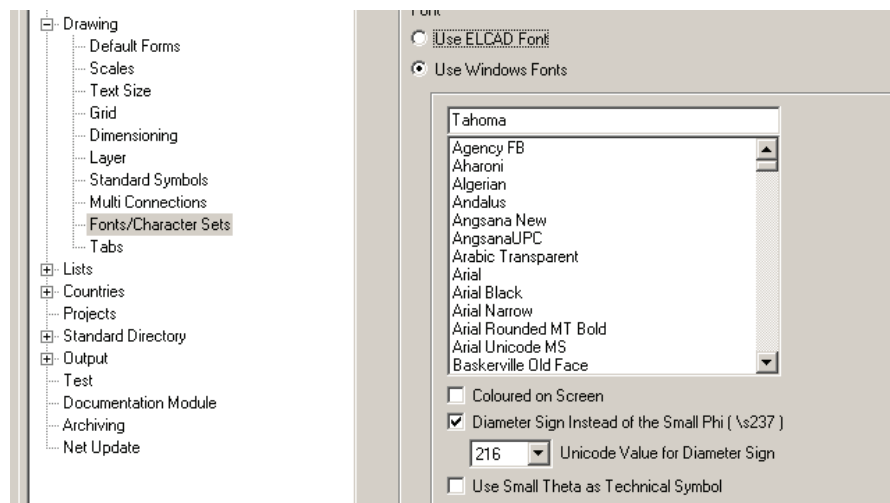


1.2.7 Representation of Theta Sign (ϑ) as Technical Symbol in Drawings

In several Windows fonts, the small Greek character "theta" is displayed as follows (θ) and not as commonly used as a technical symbol for the temperature (ϑ). The required representation exists only in some fonts.

To enable a correct display, the setting of the fonts / character sets has been extended by a checkbox for redirection to the Unicode character U+03D1 with version 7.6.0.

For this purpose activate the checkbox "Use small theta as technical symbol".

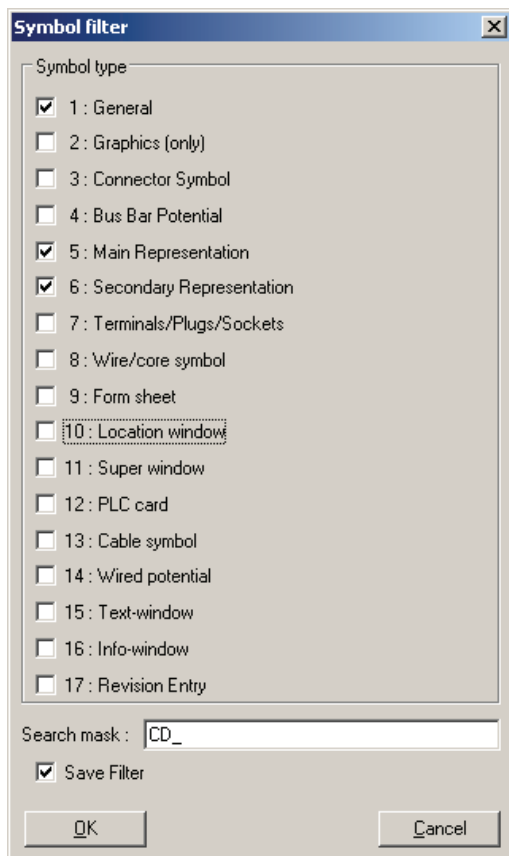


Please note that you must use Windows fonts for this purpose and that this character is present only in a small number of fonts (e.g. Arial Unicode MS, Lucida Sans Unicode). With other fonts the character is not displayed properly.

1.2.8 Keeping the Filter Settings in the Symbol Selection Dialog

In ELCAD/AUCOPLAN, you can open the symbol selection simply using the command "*" or the corresponding button. In the symbol selection you can then apply a filter by entering characters and/or specifying the symbol types.

With version 7.6.0 you can now ensure that the set filter is the default setting the next time you call the program. Simply activate the checkbox "Save filter".

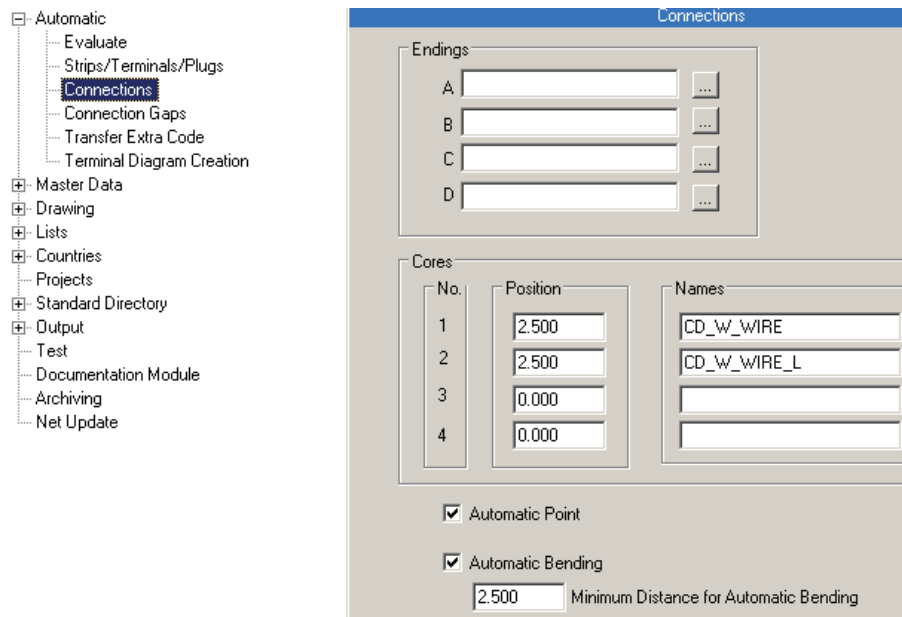


1.2.9 Adjustable Angular Offset of Connections

Up to now automatic angular connections started with the triple of the current grid. There were requests to have this value adjustable.

With ELCAD / AUCOPLAN 7.6.0 there now is a two-stage setting that is independent of the set grid.

In addition to the option to enable or disable the automatic angular connection, now there is an adjustable minimum distance at which the automatic angular connection starts. The default value is 2.5 mm.



As soon as the cross-hair pointer exceeds the set value by more than threefold while drawing a connection, the angular offset is automatically activated.

The angular offset is applied if the cross-hair pointer deviates laterally by more than the single value. It is automatically reset when this deviation becomes smaller.

The factors 1 and 3 that activate this function can likewise be set in the ini file. There is no corresponding user interface, however.

1.2.10 Code Number 4020 Extended

In order to exclude a symbol from evaluation, it is provided with the code number 4020 (deactivation of evaluability) and the entry "1".

If required, you can additionally configure via the code 4020 that the symbols exactly behave like symbols of symbol type 2 with ELCAD 7.6.0.

For this purpose enter "2" in code number 4020.

This holds for all symbols of type 1, 5, 6, 7 and 12.

1.2.11 Exchange Symbols with Connector Reduction

So far a symbol could only be exchanged if the number of the connectors remained equal or if it got larger. With version 7.6.0 the number of connectors can also be reduced during the exchange of symbols. The connectors and their designators are assigned according to their co-ordinates. Connectors already wired must not be absent.

1.3 New Features in Project Editing

1.3.1 Revision of Lines, Rectangles and Circles

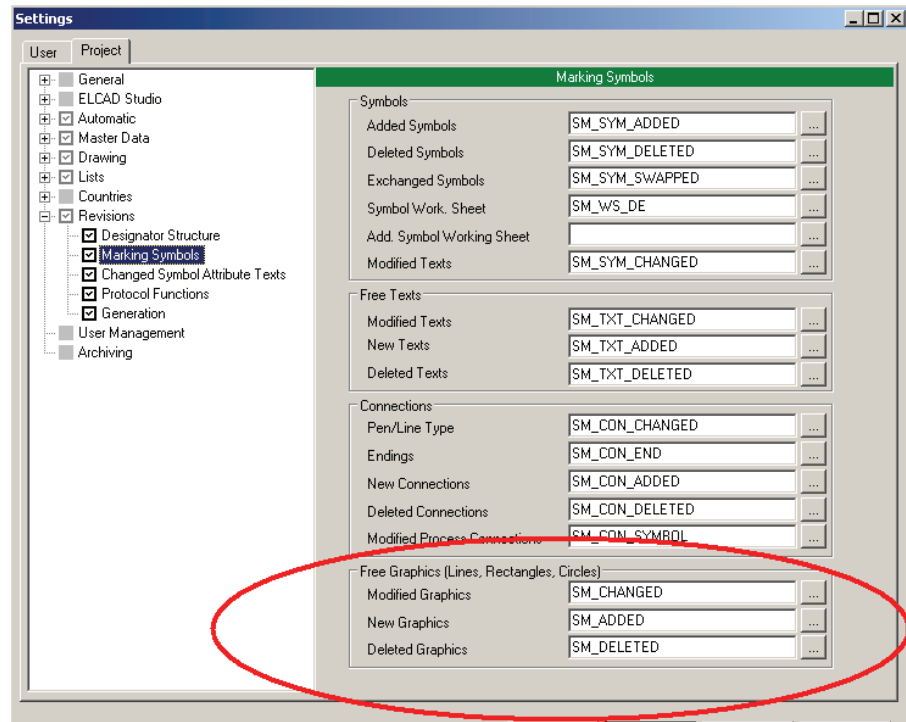
Many users wanted an expansion of the objects relevant for revisions. Therefore with ELCAD 7.7.0 you can also schedule lines, rectangles and circles for revision. The revision now also includes the following changes in the free graphic elements:

- Changes of polylines (position, pen, line type)
- Changes of rectangles (position, size, pen, line type)
- Changes of circles (position, radius, starting and end angle, pen, line type)
- Changes in these elements are also taken into account if they are contained in groups.

In contrast to symbols, ELCAD manages no unambiguous identifier for these simple elements, which could e.g. be used to track a displacement of the element. Therefore the position (for circles also the radius) is used for identification.

A displacement (for circles also a change of the radius) thus creates not only a message "Changed" but two messages, "Deleted" and "New".

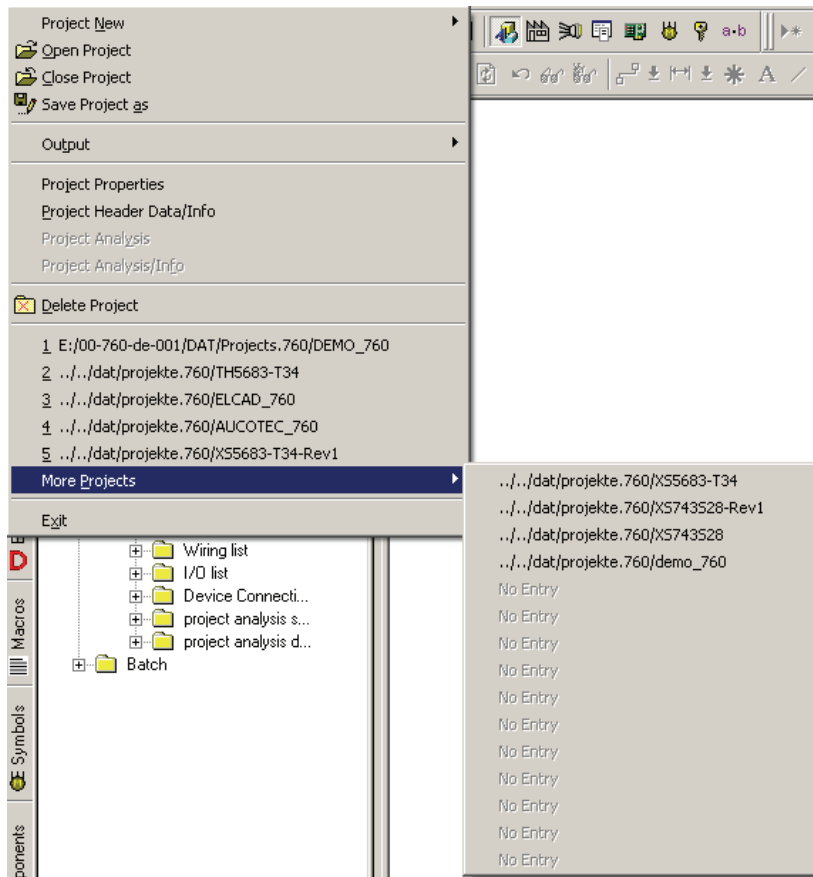
You can set the revision symbols to be placed in the graphic in the options. Identical revision symbols are used for all free graphic elements.



1.3.2 Extension of the Project History

Up to now the history of the projects last opened was restricted to 5 entries. This was however very low for users who frequently work with varying projects. Therefore the project history has been extended to 20 projects with ELCAD 7.6.0. The five projects edited last are offered on the first menu level.

A submenu is used to offer additional 15 entries of recently edited projects.

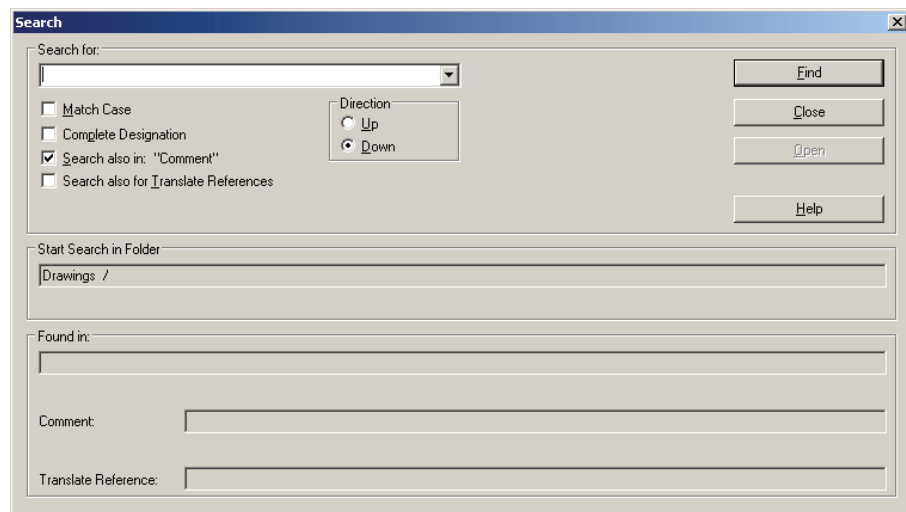


1.3.3 Extended Search in the ELCAD Trees

Following many customer requests, the search function for the ELCAD object trees has been extended and optimized in version 7.7.0. Thus the search has been newly arranged in the following areas.

- In the "Drawings" tree the search in batches.
- In the item editor the search among cables with active or inactive cable management.
- In the item editor the search in cable runs.
- In the item editor, the search in / I/O components for assignment lists from version 7 on.
- Search in the "Symbols" tree in drawing editing.
- Search in the "Components" tree in drawing editing.
- Search in the symbol tree of the symbol design.

In the course of the search function extension, the "Search" dialog was also optimized. In addition to its enlargement, the field "Found in" was introduced, which shows you the position of the search result in a clearly laid out fashion. The search text found is marked. If the retrieved search text was found in the comment or the description, it is marked here. If the result is the content of a translate reference, the translate reference is displayed.



If the search gets a result, the [Open] button is active. For many objects you can use this to start additional functions for the object. With the [Open] button you start the function that in the tree is triggered for the object with the <Return> key. Once the button is active, the function triggered when actuating the button is displayed as tool tip.

When the search function reaches the end of the respective tree, you are now made aware of this and are asked whether you want to start from the beginning.

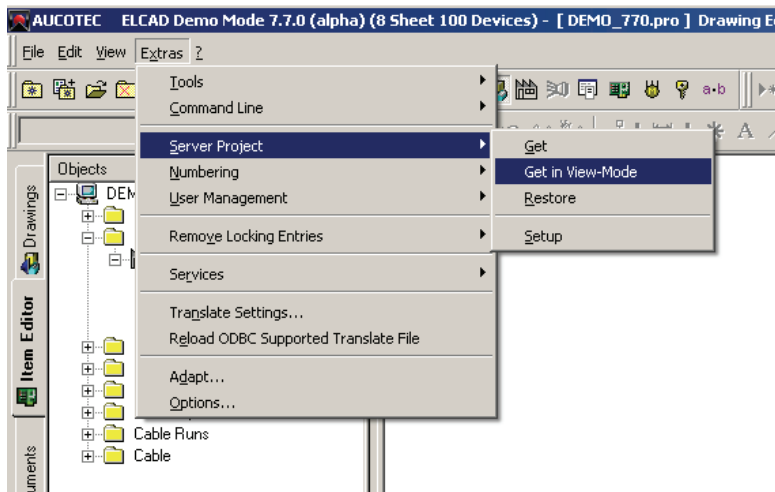
In the course of these extensions an option to assign comments to batches has also been implemented. Therefore you do no more have to supplement the batch designation with the notes telling you which action they trigger. After creating a batch, all you have to do is to assign a comment with a right mouse click.

Moreover the search for texts with umlauts in the Drawings tree has been newly arranged.

1.3.4 Editing Server Projects in the Read-only Mode

The function used to get server projects for local editing, to edit them locally and to block them during that time on the server is frequently used to carry out compute-bound evaluations without overloading the network. While the projects are blocked it is however not possible to answer questions concerning the blocked projects without previously copying them.

With version 7.7.0 you get the option to download the projects in the read-only mode even if they are blocked on the server. You find the function under EXTRAS / SERVER PROJECT / GET IN VIEW-MODE.



With this function you can retrieve for viewing both server projects that have not yet been checked out and those that have already been checked out and are blocked on the server.

These local copies of the projects are automatically assigned the read-only status. You can neither edit them nor transfer them back to the server. You can only view this local copy or delete it.

Moreover, when getting the project information is queried that is displayed as note during its later opening. A comment can be assigned for each retrieval and restore. This comment is likewise stored in the project properties.

You can have the current status of server projects displayed in the project properties. Here the project status, the editing time and the last updater are shown.

The following status information of the server projects is shown.

| | |
|--------------------------------|--------------------------|
| Working Method | Server Project |
| Project Status | : Copy only in View-Mode |
| Project was got from server at | : 03.11.2010 15:26:55 |
| Project was got from server by | : GNI.gni:0 |
| Comment | : |

In addition, the operating mode of "Restore Server Projects" was changed so that projects can be restored from the folder into which they were previously checked out with the function "Copy Server Project". If you want to still use the unaltered functionality, then insert the following entries in the aucotec.ini:

```
[System]
ServerProjectOldPutFunction=1
```

1.3.5 Storing all Error Messages in the Error List

A frequent request from customers was to be able to edit all ELCAD error messages summarily in the error list. Starting with version 7.6.0, the error list now also contains the messages arising elsewhere or were hitherto not entered, thus e.g. during the evaluation of core symbols by the cable management.

This includes the following error messages:

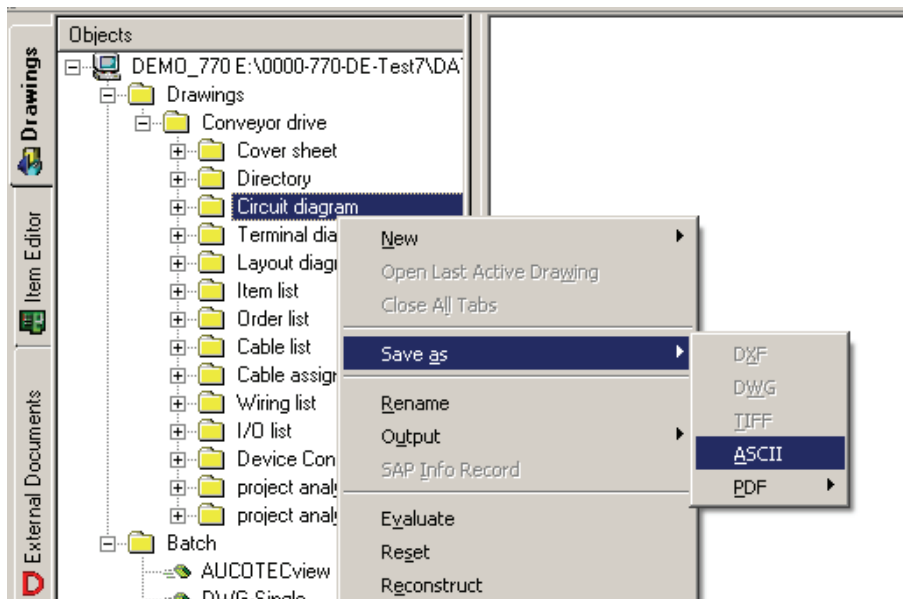
- Terminal number duplicated (terminal internal/external)
- Core has no connection relation
- Core is duplicated or not intended
- Core does not have complete destination specifications
- Designation of the core not specified
- Core does not describe an unambiguous connection
- Core does not describe any connection
- Cable designation missing
- Core specification not reserved
- Core specification not registered
- Core is at a wiring node without connections

1.3.6 Outputting Drawings to ASCII Directly in the Tree

The ASCII output of drawings is often used to save drawing stages temporarily. Up to now a batch had to be created for this purpose. With ELCAD 7.7.0 you can now output any drawing in the ASCII format directly from the Drawings tree.

You can output in ASCII all drawings, individual drawings, folders or a manual selection of drawings.

For this purpose select the desired drawings in the Drawings tree and click with the right mouse button.



The file is stored in the txt format. The project name is the default filename.

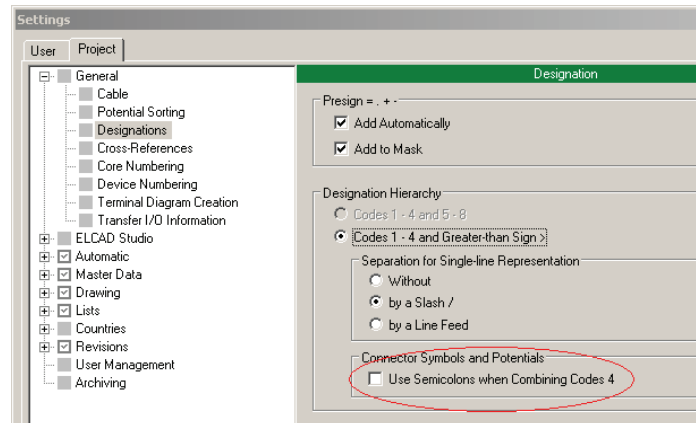
1.3.7 Concatenation of the Potential Designators According to IEC 61346

With version 7.6.0, the representation of the potential designators has been extended according to the requirements of IEC 61346.

With the designator hierarchy switched on with the greater than symbol, the designators of connector and potential symbols were up to now not linked to the entries in forms and/or windows.

From version 7.6.0, you can use the project-related options to specify whether you want to achieve a linkage of the data from forms, windows and symbols for connector symbols and potentials.

Because connector symbols and potentials do not have a special sign, the combined display uses a semicolon.



1.3.8 Storing and Pre-allocating the Destination of File Outputs

Many ELCAD/AUCOPLAN functions permit the output of a result or a protocol to files. You as the user enter the directory and the filename.

With version 7.6.0, ELCAD now stores the paths and the filenames for each action separately and offers you these entries as default when you call the next similar function.

This holds for batch actions, commands in command lines, functions in the service menu and all other functions that include writing into files.

The files are stored in a user-related manner in the file "aucotec.ini" in section [LastOutputFile].

The storage happens automatically once the respective function has been carried out in ELCAD 7.6.0.

1.3.9 New Options in Project Reconstruction

The project reconstruction in ELCAD 7.6.0 was extended by three new settings which offer additional options to the users.

Update sheets

If you have changed the ELCAD databases you can update all sheets prior to the reconstruction by means of this option.

Freeze terminals/plugs

With this function data of the terminals, such as automatically created data, e.g. the terminal number, is frozen so that it cannot get lost during the reconstruction.

Freeze secondary representations

By means of this option essential data of the slave devices is frozen so that it cannot get lost during the reconstruction.

1.3.10 Project Tools

From version 7.6.0, you can find in the context menu of the right mouse key on a project or under Extras/Services, apart from the reconstruction, the function Project Tools.

The project tools are functions which were developed originally in connection with the reconstruction and which are now separately available.

Write Terminals

With the option "Write Terminals" you can save terminals which are not represented on the drawings, such as terminals created in the terminal editor.

Read Terminals

With the option "Read Terminals" you can import terminal information saved by the function "Write Terminals".

Read Standard Strips

If the project contains standard strips the original standard strip information can be imported again by means of this option.

Update Sheets

After changes in the database (e.g. freezing strips in the item tree) this option is used to update all sheets.

1.3.11 Navigate from List Editing Directly to Drawing Editing

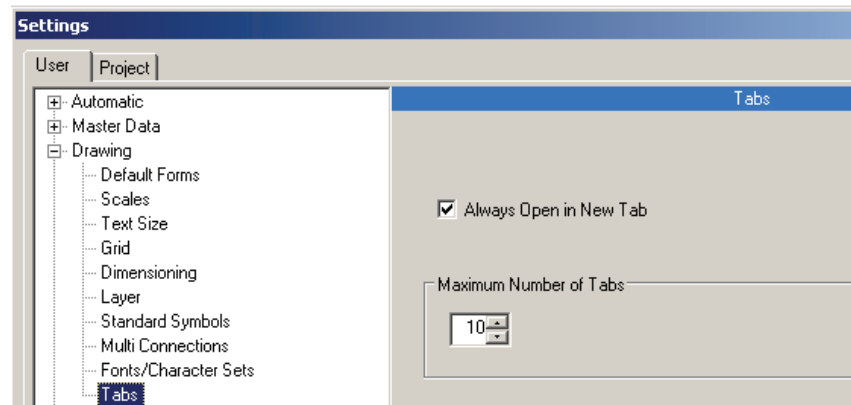
In list editing you now can navigate from an opened list directly to the object of the corresponding drawing sheet (e.g. page in circuit diagram, layout diagram of graphic contents table).

If drawing editing is then closed the program automatically returns to the previous table in list editing.

1.3.12 Opening Drawings in New Tabs During Navigation

When navigating in ELCAD, up to now a drawing was opened in the same tab as the drawing opened previously.

With version 7.6.0 each drawing started by navigation from the equipment tree, the toolbar or with the command "N" is opened in a new tab, the only prerequisite being that this feature is set in "Options / User / Drawing / Tabs".



1.4 New Features in List Editing

1.4.1 Multiple Protocol Export to Drawings

With version 7.6.0, ELCAD/AUCOPLAN enables a multi-protocol export from drawings. Up to now one could carry out only one protocol using the function "Export to Drawings". For each output one had to restart the function with another protocol.

In the current protocol selection for the export from drawings you can now mark several protocols. With the button "Execute" all marked protocols are then output one by one.

| Protocol Selection Export to Drawings | | |
|---------------------------------------|-------------------|------------------------|
| | OutputDesignator | OutputComment |
| ✓ | Order list | Sorted by location |
| ✓▶ | Second Order list | Sorted by manufacturer |
| | | |
| | | |
| | | |

1.4.2 Conversion of the # Character During List Export

In ELCAD/AUCOPLAN lists the # character is often used as line break. Depending on whether you want to further edit the exported lists with other programs or to later read them into ELCAD, you must either retain the character during the standard export or change it.

With ELCAD 7.6.0 you can now specify in the output dialog of the standard export whether or not you want to convert the # character into a blank.

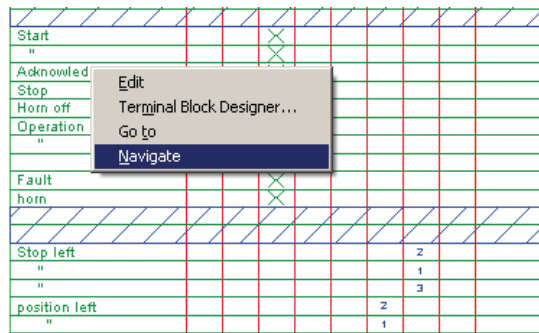
The screenshot shows a dialog box with the following elements:

- Dateiname:** An empty text input field.
- Dateityp:** A dropdown menu currently set to "All Files (*.*)".
- Sequence according:** A group box containing two radio buttons:
 - display
 - internal table structure
- UNICODE
- Translate Translate References
- Convert Hash Character (#) to Blank

1.5 New Features in Terminal Editing

1.5.1 Navigation from the Terminal Diagram to the Drawing

To enable this, a new feature was implemented in version 7.6.0: When you hit terminal symbols of a terminal diagram with the right mouse button, the context menu offers the menu item "Navigate". Using this menu item, you can now navigate from the terminal diagram directly to the representation of the terminal in the circuit diagram.

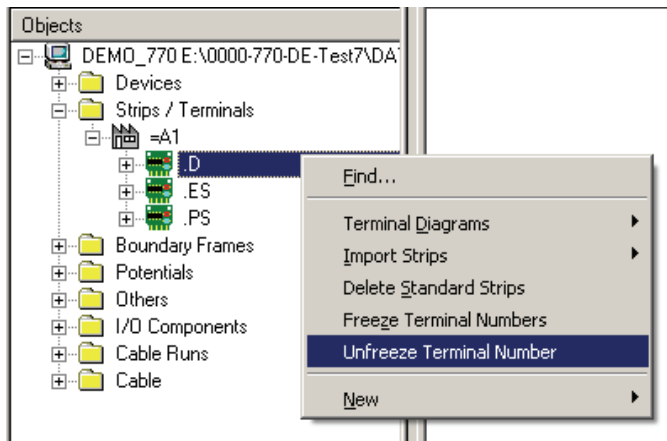


1.5.2 Unfreezing Terminal Numbers in the Item Editor

With version 7.7.0, the selection of terminal numbers to be unfrozen has been considerably simplified. You can now choose to which extent you want to unfreeze terminals.

- Unfreezing all strips of a project
- Unfreezing all strips of a location
- Unfreezing a single strip

For this purpose switch over to the item editor and there to the section "Strips / Terminals", then select the complete section, a location or a terminal strip. With a right mouse click you then get the menu item UNFREEZE TERMINAL NUMBERS.



Subsequently you get a cautionary query meant to prevent unintentional unfreezing. Click on OK to unfreeze the terminal numbers. All terminals of the selected blocks are now reset to the status "automatically designated". Finally you get a message about the number of the unfrozen strips and terminals.

1.5.3 Extension of the Terminal Block Designer

In the Terminal Block Designer it is from ELCAD-Version 7.7.0 possible to print a strip. For this purpose a print preview is available.

| | Sta | Kabel L | Adrer | Ziel Links | B1 | B2 | B3 | B4 | Dr | Ansc | BI | Klerr | Br | Ansc | Ziel Rechte | Kabel R | Adrer | Pos | E | Artikelnummer | Typ | Quers |
|----|-----|---------|-------|------------|----|----|----|----|----|------|----|-------|----|------|-------------|---------|-------|-----|---|---------------|-----------|-------|
| 1 | | | | -3V2.3 | | | | | | | | | | | +C1PE | | | 1 | | PHC B02-S-001 | MTHD | 2.50 |
| 2 | | | | -3G1-24V | | | | | | | | | | | -7F1.1 | | | 2 | | PHC ST2-S-001 | UK 2,5 N | 2.50 |
| 3 | | | | -7F2.1 | | | | | | | | | | | -5F1.1 | | | 3 | | PHC ST2-S-001 | UK 2,5 N | 2.50 |
| 4 | | | | | | | | | | | | | | | -7F3.1 | | | 4 | | PHC ST2-S-001 | UK 2,5 N | 2.50 |
| 5 | | | | | | | | | | | | | | | | | | 5 | | PHC ST2-S-001 | UK 2,5 N | 2.50 |
| 6 | | | | | | | | | | | | | | | | | | 6 | | PHC ST2-S-001 | UK 2,5 N | 2.50 |
| 7 | | | | | | | | | | | | | | | | | | 7 | | PHC ST2-S-001 | UK 2,5 N | 2.50 |
| 8 | | | | -12A4.1 | | | | | | | | | | | -5F1.2 | | | 8 | | PHC ST2-S-001 | UK 2,5 N | 2.50 |
| 9 | | | | | | | | | | | | | | | -3G2.23 | | | 9 | | PHC ST2-S-001 | UK 2,5 N | 2.50 |
| 10 | | | | | | | | | | | | | | | -19G1.10 | | | 10 | | PHC ST2-S-001 | UK 2,5 N | 2.50 |
| 11 | | | | | | | | | | | | | | | -3W2.89 | | | 11 | | PHC ST2-S-001 | UK 2,5 N | 2.50 |
| 12 | | | | | | | | | | | | | | | -3W2.81 | | | 12 | | PHC ST2-S-001 | UK 2,5 N | 2.50 |
| 13 | | | | | | | | | | | | | | | | | | 13 | | PHC ST2-S-001 | UK 2,5 N | 2.50 |
| 14 | | | | -3G1.0V | | | | | | | | | | | -3W2.1.2 | | | 14 | | PHC ST2-S-001 | UK 2,5 N | 2.50 |
| 15 | | | | | | | | | | | | | | | -3W2.1.10 | | | 15 | | PHC ST2-S-001 | UK 2,5 N | 2.50 |
| 16 | | | | | | | | | | | | | | | -12A1-X0.2 | | | 16 | | PHC ST2-S-001 | UK 2,5 N | 2.50 |
| 17 | | | | | | | | | | | | | | | | | | 17 | | PHC ST2-S-001 | UK 2,5 N | 2.50 |
| 18 | | | | | | | | | | | | | | | | | | 18 | | PHC ST2-S-001 | UK 2,5 N | 2.50 |
| 19 | | | | | | | | | | | | | | | | | | 19 | | PHC ST2-S-001 | UK 2,5 N | 2.50 |
| 20 | | | | | | | | | | | | | | | -12A4.20 | | | 20 | | PHC ST2-S-001 | UK 2,5 N | 2.50 |
| 21 | | | | | | | | | | | | | | | -12K1-A2 | | | 21 | | PHC ST2-S-001 | UK 2,5 N | 2.50 |
| 22 | | | | | | | | | | | | | | | -19G1.9 | | | 22 | | PHC ST2-S-001 | UK 2,5 N | 2.50 |
| 23 | | | | | | | | | | | | | | | -3W2.90 | | | 23 | | PHC ST2-S-001 | UK 2,5 N | 2.50 |
| 24 | | | | | | | | | | | | | | | -13A6.9 | | | 24 | | PHC ST2-S-001 | UK 2,5 N | 2.50 |
| 25 | | | | | | | | | | | | | | | | | | 25 | | PHC ST2-S-001 | UK 2,5 N | 2.50 |
| 26 | | | | | | | | | | | | | | | | | | 26 | | PHC B02-S-001 | MTHD | 2.50 |
| 27 | | | | | | | | | | | | | | | +C1PE | | | 27 | | PHC ST2-S-003 | USLKG 2,5 | 2.50 |
| 28 | | | | | | | | | | | | | | | +C1PE | | | 28 | | PHC ST2-S-003 | USLKG 2,5 | 2.50 |
| 29 | | | | | | | | | | | | | | | +C1PE | | | 29 | | PHC ST2-S-003 | USLKG 2,5 | 2.50 |

Moreover it is now possible to transmit purely numerical part numbers to other terminals by simply "dragging down" the column as in Excel.

1.5.4 Specifying Entries for Block-related Terminal Diagrams

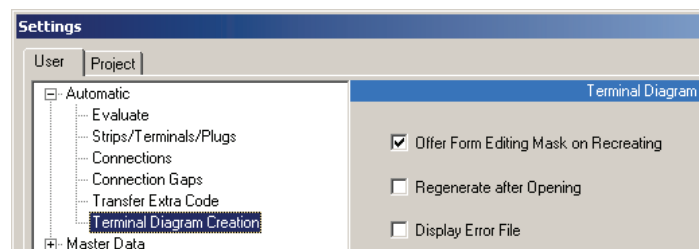
For block-related terminal diagrams, which you can create without batch processing, retroactive editing of the form entries was time-consuming.

Therefore starting with ELCAD/AUCOPLAN 7.6.0, the edit mask of the form is offered for the first drawing to be created when you first generate the block-related terminal diagrams or connector diagrams.

Here you can enter generally applicable entries, which are then transferred to all automatically created successive sheets. During regeneration the former form entries are kept. If you want to have new specifications in the forms, then you must first delete the drawings.

When sheets are deleted, then this information is not saved but must be re-entered during the next initial creation.

You can specify in the user settings whether you are offered the form for editing during initial creation.



1.6 New Features in Cable Editing

1.6.1 Creating the cable list from the Item tree

To further simplify the handling of cable editing, you can start various cabling functions from the Item tree with version 7.6.0.

For this purpose the following functions have been added to the Item tree in the folder "Cables", which are activated with the context menu (right mouse button):

- Cable list
- Cable assignment list
- Update cable destinations

It is not possible to regenerate or delete cable lists from the Item tree.

1.7 New Interface Features

1.7.1 Extensions in the Adoption of Existing Data into Engineering Base

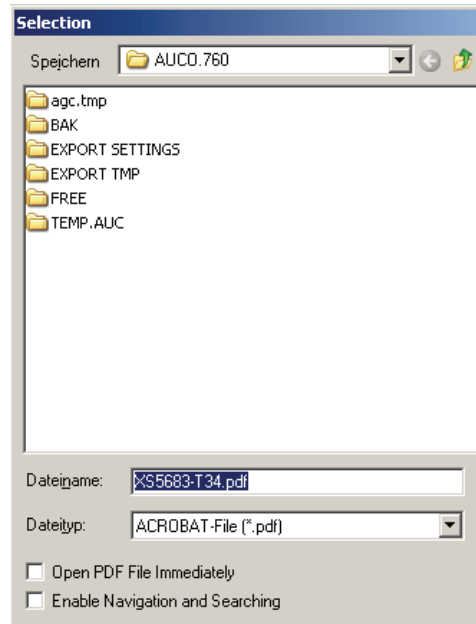
Another component of ELCAD 7.7.0 is a distinctly expanded performance range for the adoption of existing data into Engineering Base. Among other things the following functions have now become constituents of the data adoption:

- ELCAD symbols can be replaced by existing EB shapes during migration.
- Secondary representations not really existing in ELCAD, e.g. layout representations of devices, are converted to actual secondary representations in EB.
- Transfer of the device master data to EB.

Moreover many feedback messages and much experience gained concerning the adoption of projects have been incorporated into ELCAD 7.7.

1.7.2 Outputting Compact PDF Files with the Project Designation

For the compact PDF output of ELCAD 7.6.0, the project designation is the default PDF filename in the dialog box for specifying the memory location and the name.



During the direct PDF output from the Drawings tree, you find the default value via the right mouse button. The default path is given by the folder set in the PDF configuration.

Another novelty is that when defining the PDF output in a batch, you are offered the dialog with the options "Enable Navigation and Searching" and "Open PDF File Immediately"; the settings specified there are saved together with the batch definition. The detailed information of a batch then shows the memory location, the file-name and the output options.

If you want to keep the former output for a batch, terminate the selection dialog with [Cancel]. With the following switch you can moreover reactivate the former function when defining a compact PDF batch.

[Pdf]

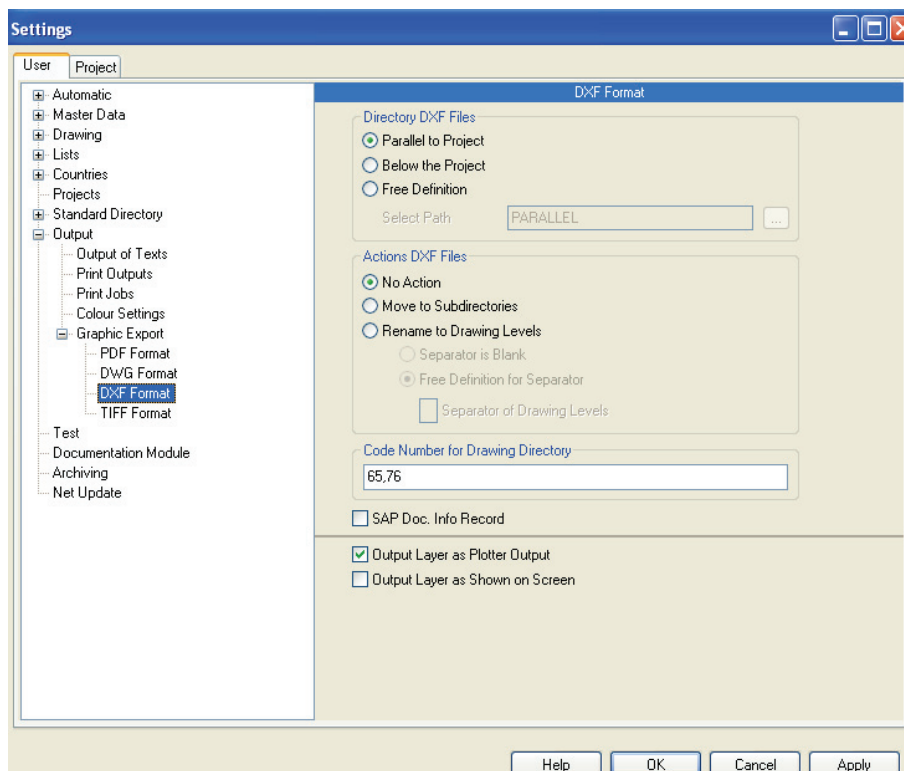
UseOldBatchPdfCompactMode=1

If you have an SAP license, you can specify whether an SAP document info set is to be created; however this is possible only if no navigable PDF is created.

1.7.3 Specifying the DXF Export like the Printer Output

Up to now it was possible to specify the layer settings for the DXF output of drawings as for the screen display. If someone wanted to use different layer settings, he had to change the settings before the DXF export.

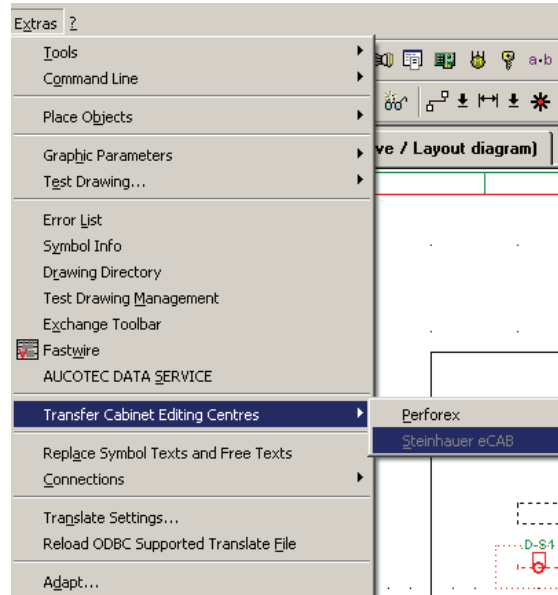
With version 7.7.0 it is now possible to use the same layer settings for the DXF export as for the output to a printer / plotter. During the export, this setting activates the layer settings that were specified for the printer output. You find this new option in the Settings.



If both switches are set, then the plotter output setting prevails.

1.7.4 Support of the Steinhauer eCAB Workcenter

With ELCAD/AUCOPLAN 7.6.0 it is now possible to output manufacturing data from an open layout drawing to the Steinhauer eCAB Workcenter.



Please note that you need a separate license for the eCAB output.

1.7.5 DOCware Output as EDM Function

Starting with version 7.7, the output of ELCAD drawings to the DOCware Parts-Publisher is also available as a function of the EDM interface.

Via the keyword "DOCWARE" the EDM system starts a DOCware output for the specified project. The command can be configured as single or multiple actions.

Example for configuring an output path in the control file edm2elc.ini:

```
[Config]
DocWareExportPath=x:\transfer
```

If the output files are generally to be stored in a certain folder, you can specify a global output path in the aucsys.ini or aucotec.ini.

Example for configuring a global output path:

```
[System]
EdmDocWareExportPath=x:\transfer
```

If you here enter the keyword "\$pro" as target, then the files will always be stored in the subfolder "docware" of the project folder.

If an output folder has not been defined either in the EDM system or the aucsys.ini, then the files are stored in the ELCAD working directory in a folder with the name of the project.

1.7.6 Handling Copy Errors in the Generating Interface

Processing the instruction file is aborted if one of the specified source sheets is missing during copying the sheets.

Set the following switch in the aucotec.ini file to configure that the instruction file is always processed completely.

Messages are displayed at the end if there were errors during copying the sheets:

```
[ProjectGenerateInterface]  
CopySheetErrorNoCancel=1
```

