AmpereSoft
simply faster engineering

AmpereSoft ToolSystem 2026.1

New features & improvements

AmpereSoft ProPlan

AmpereSoft MatClass

AmpereSoft QuotationAssistant

AmpereSoft ToolDataManager

AmpereSoft TemperatureCalculator

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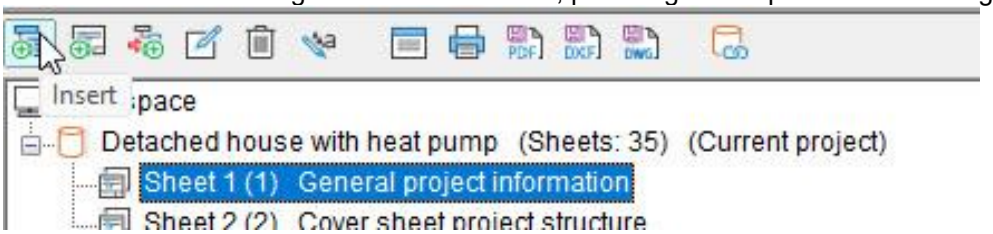
1. AmpereSoft ProPlan

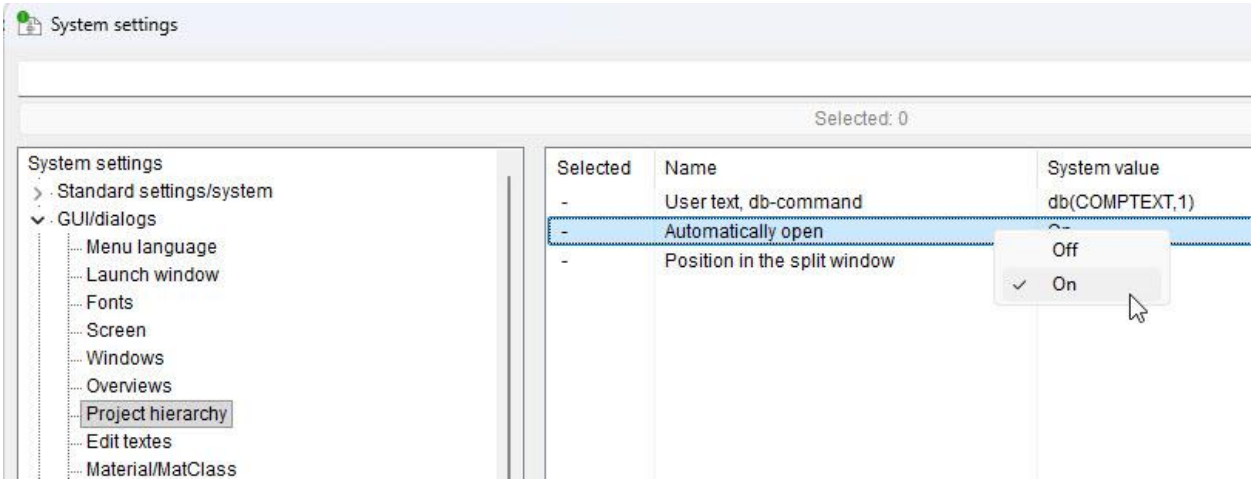
1.1. New functions

1.1.1. Redesign of the project hierarchy

The Project Hierarchy window has been given a new and more modern interface.

The icons are now arranged above the window, providing more space for describing your project structure.

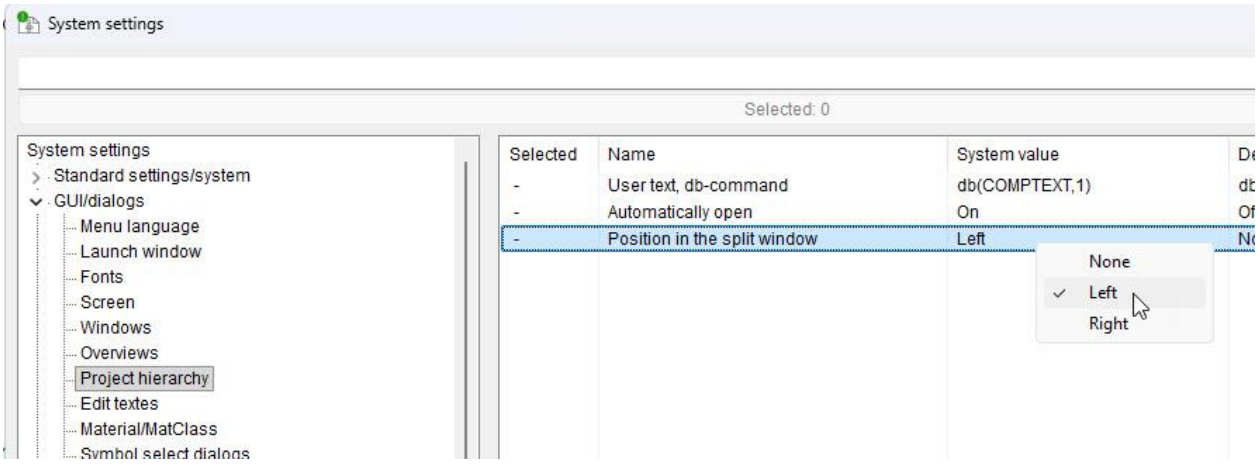


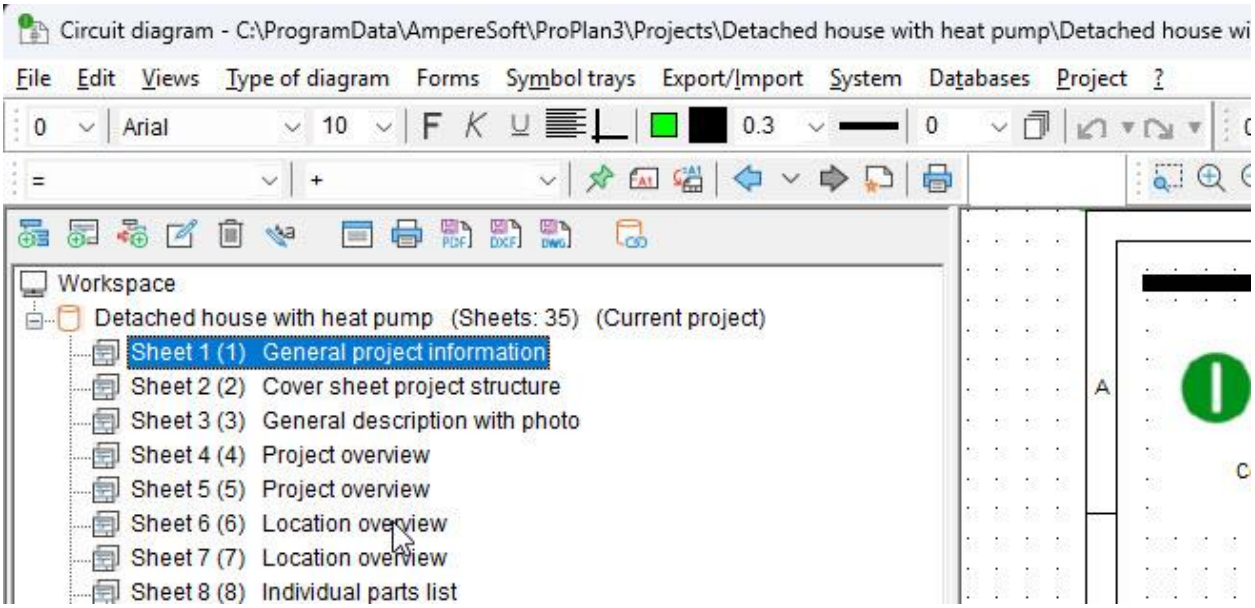


If you want the window to be automatically docked to the graphics window, then switch the window to on. With the next switch, Position in Split Window, you can decide whether the project hierarchy should appear on the left or right side of your graphics screen.

If the switch is set to off, the Project Hierarchy window can be called up as needed.

To navigate the project structure, you can now position the Project Hierarchy window on the left or right side of the graphics interface.

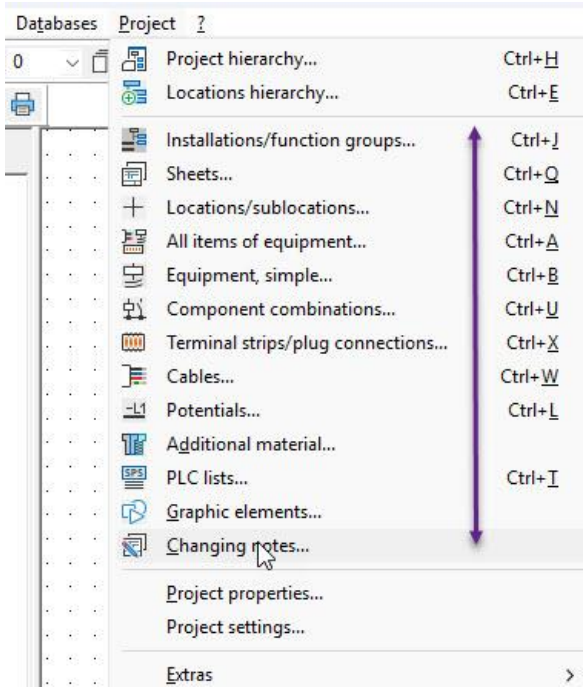


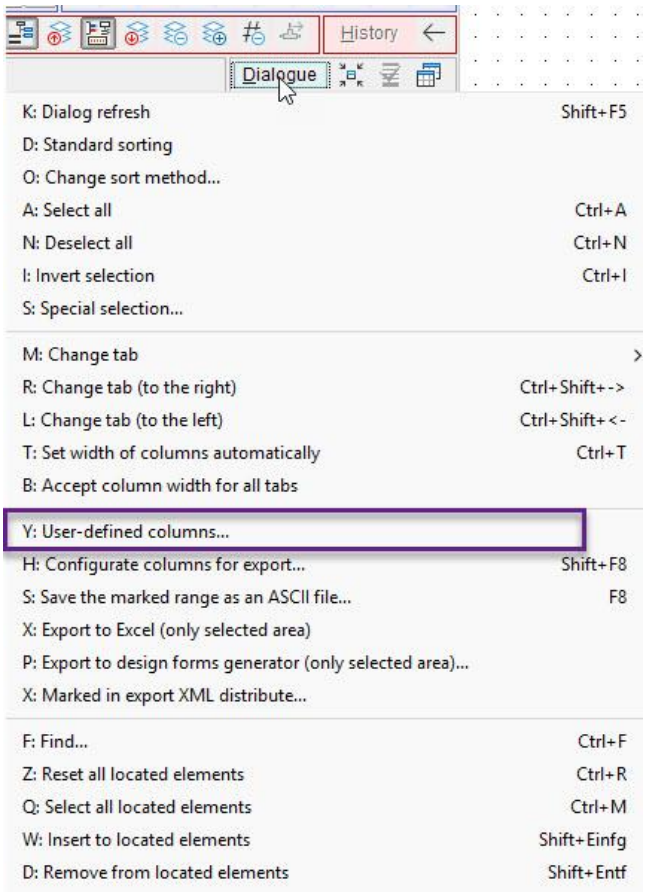


By integrating the project hierarchy into the graphics window, the space available on the screen has been fully utilised.

1.1.2. Transferring user-defined views in the Project Explorer to other computers

You can set a separate view of the parameters for each Project Explorer component. To set the parameter display, use the Dialog menu item and then go to the "User-defined columns..." line.





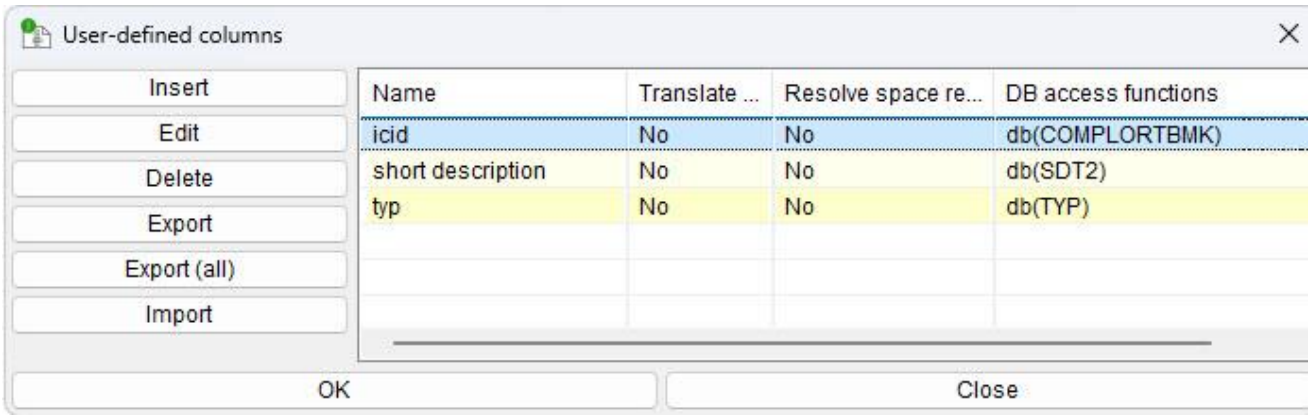
You can set a separate view of the characteristics for each component of the Project Explorer, as the contents of the characteristics also vary. The components of the Project Explorer range from **Installation/function groups** to **Changing notes**.

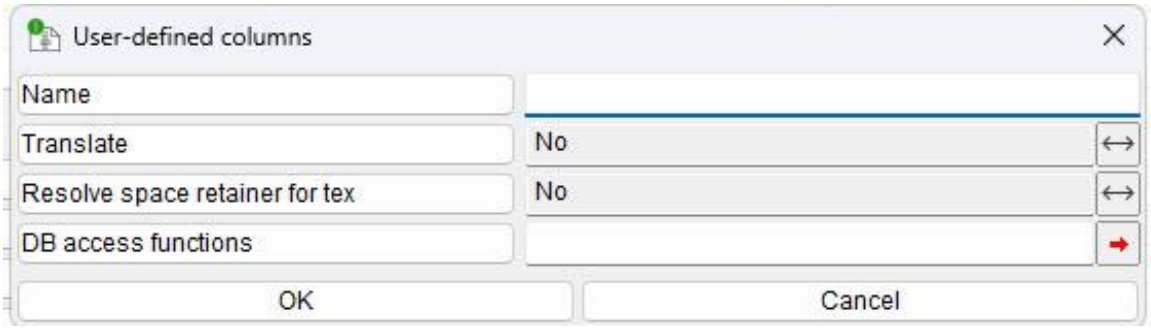
In our example, we want to set a separate user-defined view for the **All items of Equipment** component.

To do this, go to the Dialog menu and then open the **User-defined Columns** window.

After you have opened the Custom Columns window, you can decide which characteristic you want to display in the lower window.

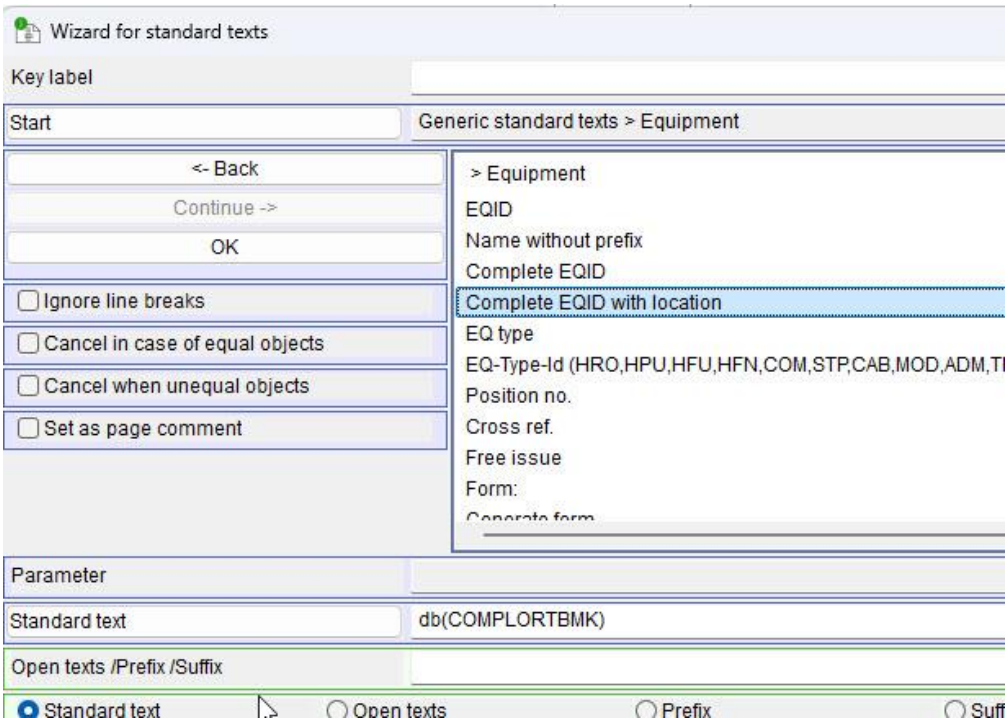
For example, if you want to display BMK with location, click the Insert button.



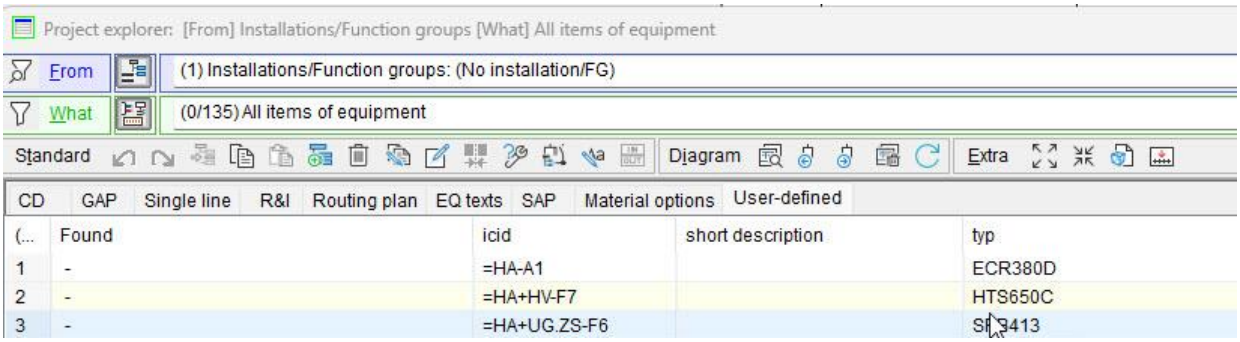


For the column name, enter complete EQID with location. Then click on **DB access functions**.

In the Key Text Generator window, select the desired parameter and confirm the window with **OK**.

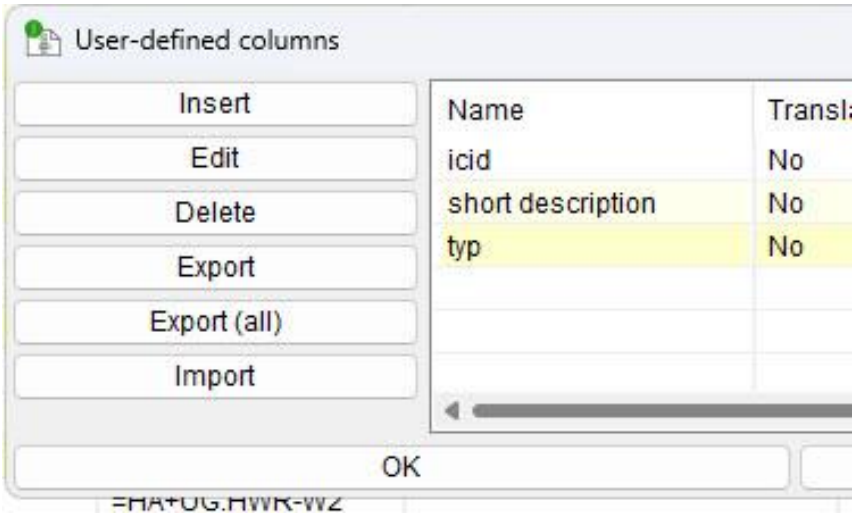


You can insert the other parameters using the same procedure and then display the result using the Custom tab.



If desired, the order of the columns can be changed using drag and drop.

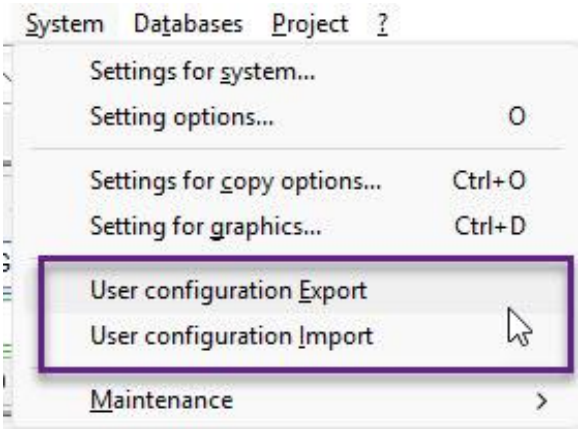
Once you have set the desired view for your Project Explorer components, you can export the set view from the selected component under User-defined columns Export. With Export (all), you can export the user-defined views from all other components.



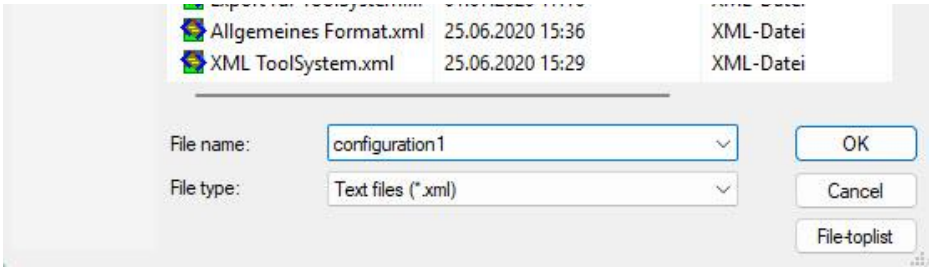
You can then re-import the exported XML files on another computer under Import.

1.1.3. Transferring configuration settings such as grid, layer and font size

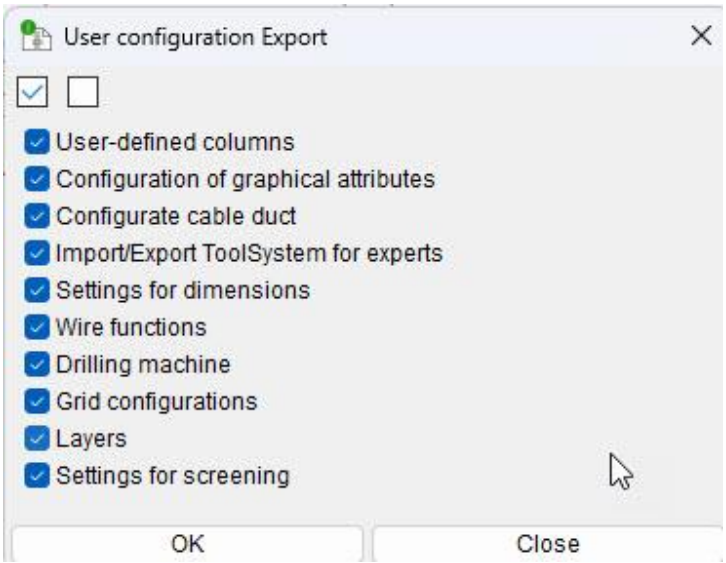
You can customise all configuration settings that are not stored as system values in the Proplan3.cfg file and transfer them to another computer or save them as a backup copy.



To export the configuration file:



When exporting or importing, you can select whether you want to export or import all switches or selected switches by ticking the box.

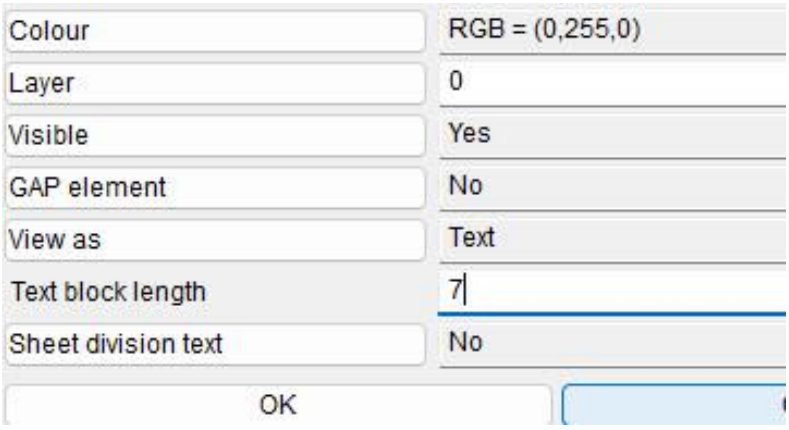


It should be noted that some switches are project-dependent and the imported switch setting only takes effect when a new project is created, e.g. layer management.

1.1.4. Texts with different representations for the use of different symbols

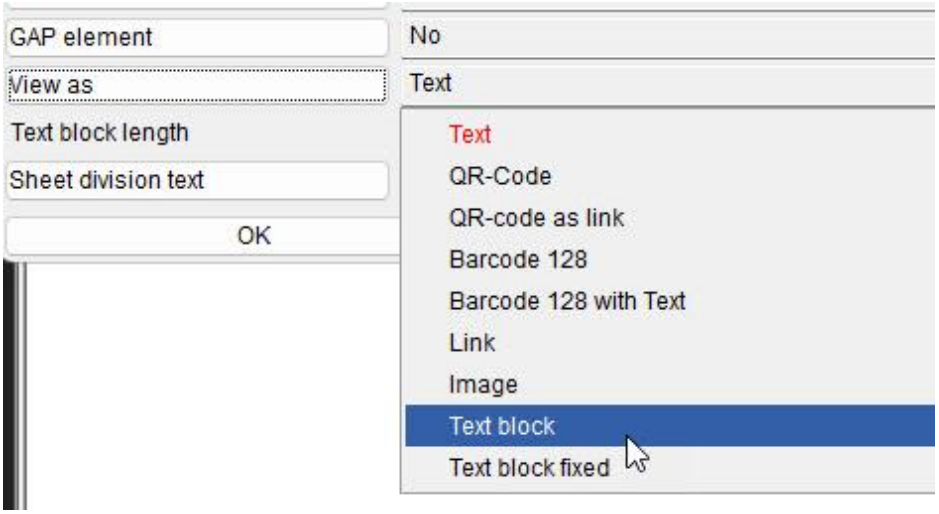
If a resource text is to be displayed in different lengths for different applications, such as main symbols and CD parts, due to space constraints, you can specify when a line break should be created in the text entry. These texts can be separated with a specific parameter.

The character count must be entered as an integer between 0 and 255 and corresponds to the maximum length of a line in the text block.



To display line breaks, you can use two additional parameters under Display as **Text block** and **Text block fixed**.

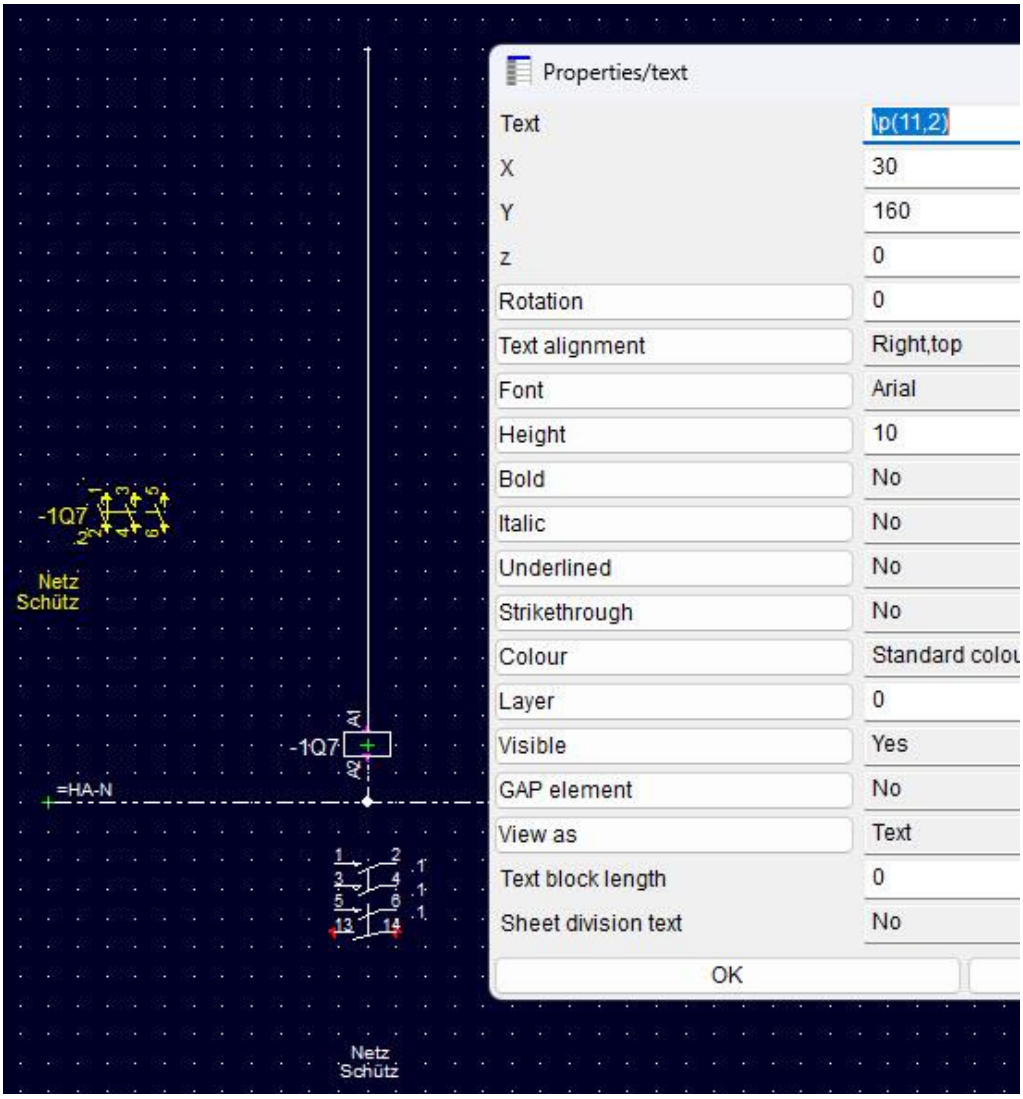
The **Text block fixed** parameter creates a line break exactly after the specified number, and the **Text block** only after a space or punctuation mark.

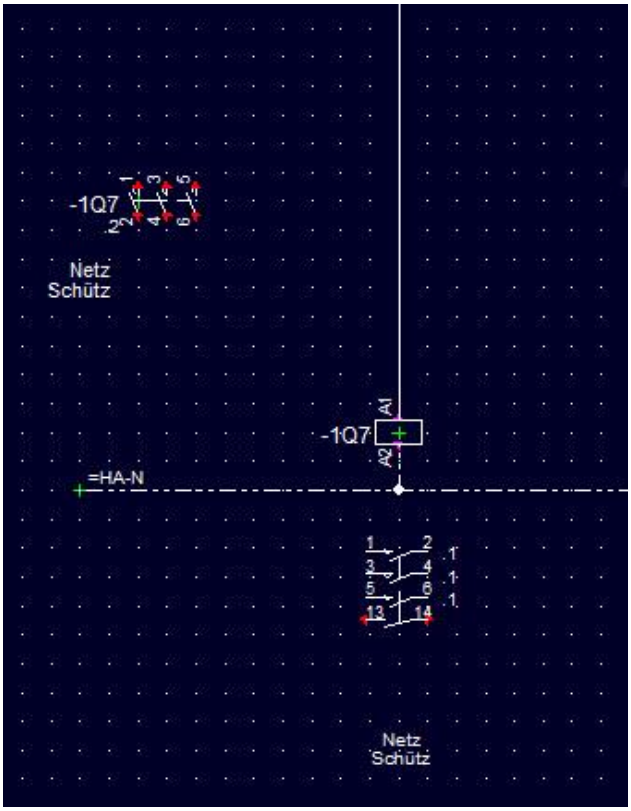


To create a line break for the CD part, right-click while holding down the Ctrl key and then select Properties.

In this example, we want to write the text "Netz Schütz" on two lines for the symbol with three main contacts.

By selecting **Text block**, the space was recognised as a character break.


Properties/text
Text
\p(11,2)
X
30
Y
160
z
0
Rotation
0
Text alignment
Right,top
Font
Arial
Height
10
Bold
No
Italic
No
Underlined
No
Strikethrough
No
Colour
Standard colou
Layer
0
Visible
Yes
GAP element
No
View as
Text
Text block length
0
Sheet division text
No
OK
-1Q7
Netz
Schütz
A1
A2
=HA-N
1
2
3
4
5
6
13
14
Netz
Schütz


-1Q7
Netz
Schütz
A1
A2
=HA-N
1
2
3
4
5
6
13
14
Netz
Schütz

1.1.5. New configuration files for forms and lists

In response to further requirements from the application, we have created new configuration files and assigned them to the forms.

By default, these configuration files can be found at the following path:
C:\ProgramData\AmpereSoft\ProPlan3\sys

The list below shows the configuration files with the corresponding form types.

formular typ	configuration file	definition file
Projekt-und Blattübersicht	ProjectOverview.xml	.....
Changing note	Uni-Form-Script-V25.xml	Uni-Form-Definition-V25.cml
location overview	Uni-Form-Script-V25.xml	Uni-Form-Definition-V25.xml
potential overview	Uni-Form-Script-V25.xml	Uni-Form-Definition-V25.xml
connection table	Uni-Form-Script-V25.xml	Uni-Form-Definition-V25.xml
wiring list	Uni-Form-Script-V25.xml	Uni-Form-Definition-V25.xml
label printer for terminal labeling	Uni-Form-Script-V25.xml	Uni-Form-Definition-V25.xml
GAP legend	Parts-Form-Script-V25.xml	Parts-Form-Definition-V25.xml
Parts form	Parts-Form-Script-V25.xml	Parts-Form-Definition-V25.xml
PLC list	BOM-PLC.xml	PLCDefinition.xml
EQID labels Form	BOM-V25.xml	BOM-V25-DEF.xml
single-/total parts list	BOM-V25.xml	BOM-V25-DEF.xml
Equipment overview	Form-Script-22-1.xml	Form-Definition-22-1.xml
terminal strip overview	Form-Script-22-1.xml	Form-Definition-22-1.xml
cores table	Form-Script-22-1.xml	Form-Definition-22-1.xml
terminal table	.....	.....
Bauartnachweis (Deckblatt)	Bauartnachweis	.....

1.1.6. Addition to user data

S7-1200-G2 and ET200BL have been added as new decentralised peripherals in the Siemens Simatic symbol tray.

ET200BL

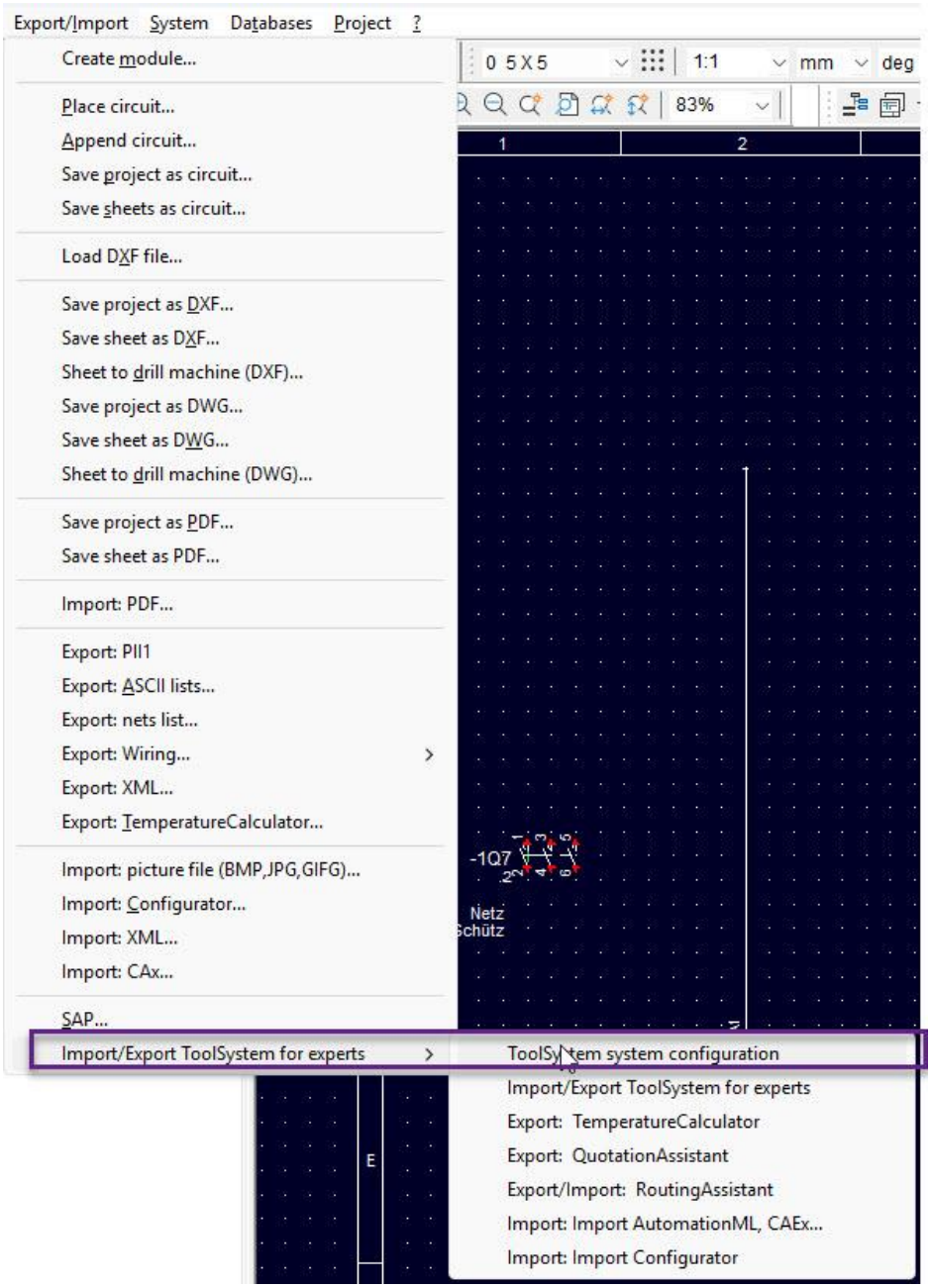
S7-1200-G2

The project "Detached house with heat pump" has been added to the sample projects.

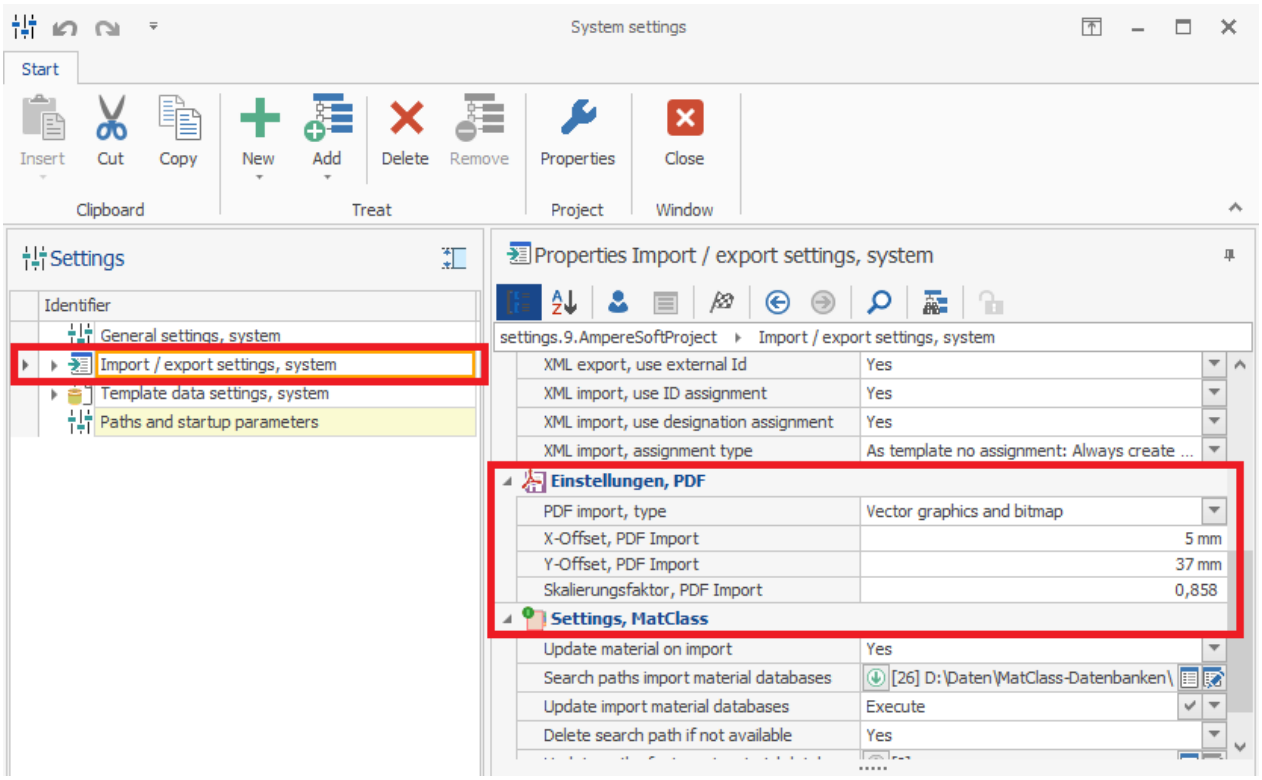
1.2. Improvements in the application

1.2.1. Setting options when importing PDF files

To fit the imported graphic into a frame sheet when importing PDF files, you can now set an offset and a scaling factor. To do this, go to Export/Import and then select Export/Import ToolSystem for experts:



The new settings window will then open. Click on Import/Export Settings, System, and you can adjust the PDF settings as required in the right-hand window.



To calculate the imported area, it is important to know that the zero point is located at the bottom left and the left corner point is at x=0 and y=17 mm. To import an A4 format PDF file into the usable page area, the x-value = 5 mm and y = 37 mm, and the scaling factor has a value of 0.858. The scaling factor consists of the ratio of the usable page height = 255 mm divided by the A3 page height of 297 mm.

1.2.2. Material exchange with material options from CC to simple EQ and vice versa

This process has been improved so that you can easily exchange component combinations for individual equipment or vice versa.

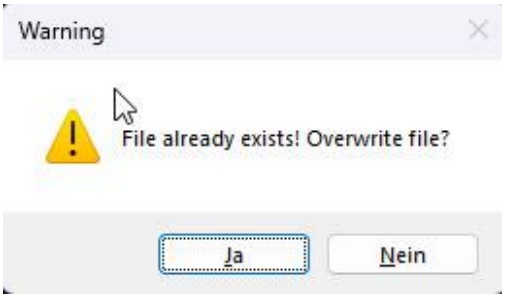
To exchange a component combination for an individual equipment, the header of the combination must be opposite the equipment to be exchanged in the Material Option – Overview window.

1.2.3. When a ProPlan project is opened, the MatClass window comes to the foreground

When large ProPlan projects are opened, the MatClass database usually responds with a delay after the ProPlan project has already been selected and appears on the screen. If the MatClass window appears with a delay, it always comes to the foreground. If other applications are open on the screen, the appearance of MatClass can be disruptive. With this change, MatClass no longer comes to the foreground.

1.2.4. Warning message when copying an image file with the same name into a project

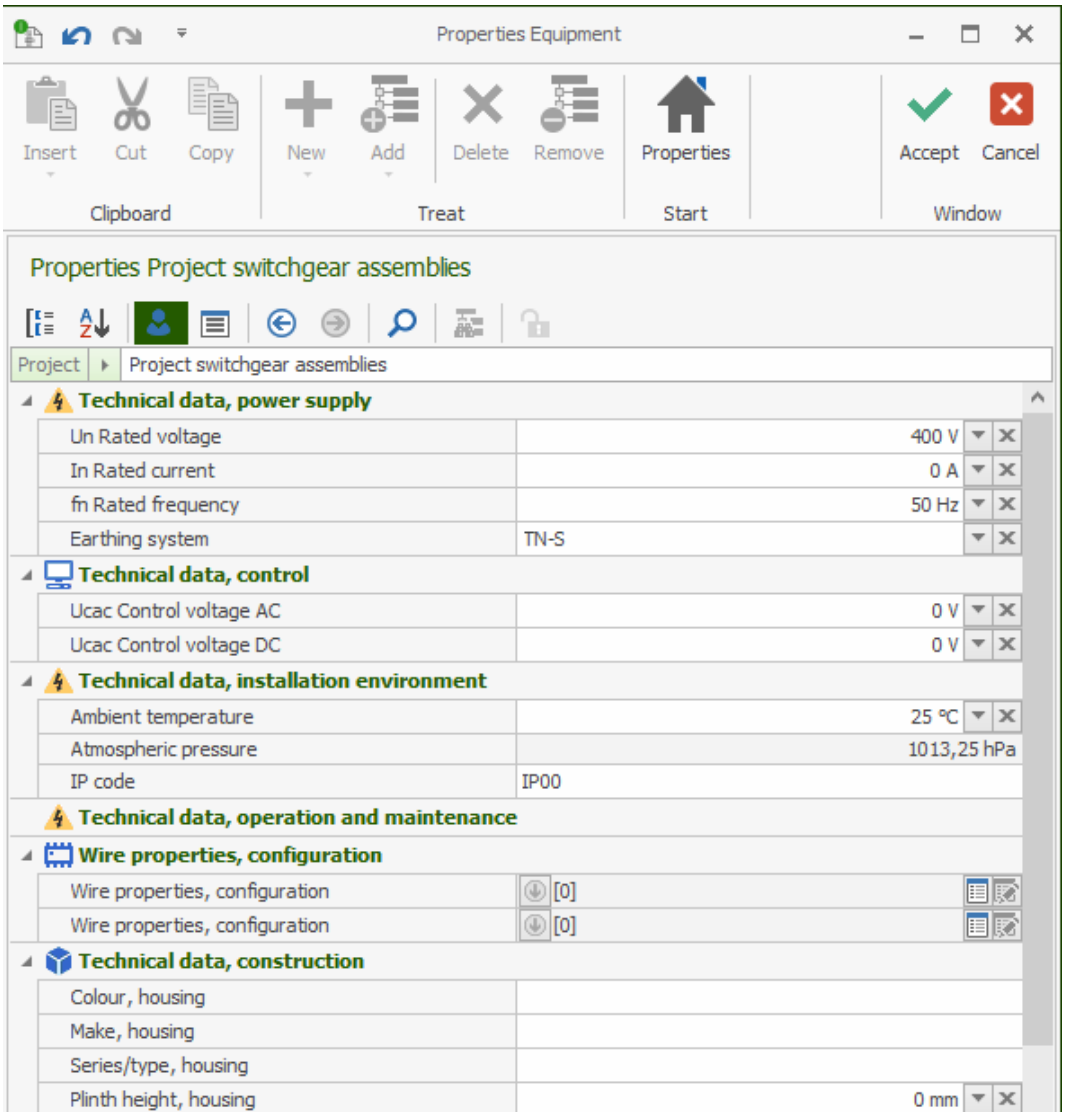
If you copy an image file that is already being used in the project into another project, you will receive a warning message if the content of this file is different.



If you select Yes, all images will be overwritten with the new content. If you select No, a new image file will be created in the project and the name of the image file will be supplemented with the number 1.

1.2.5. New Save button on the “Technical Data” window

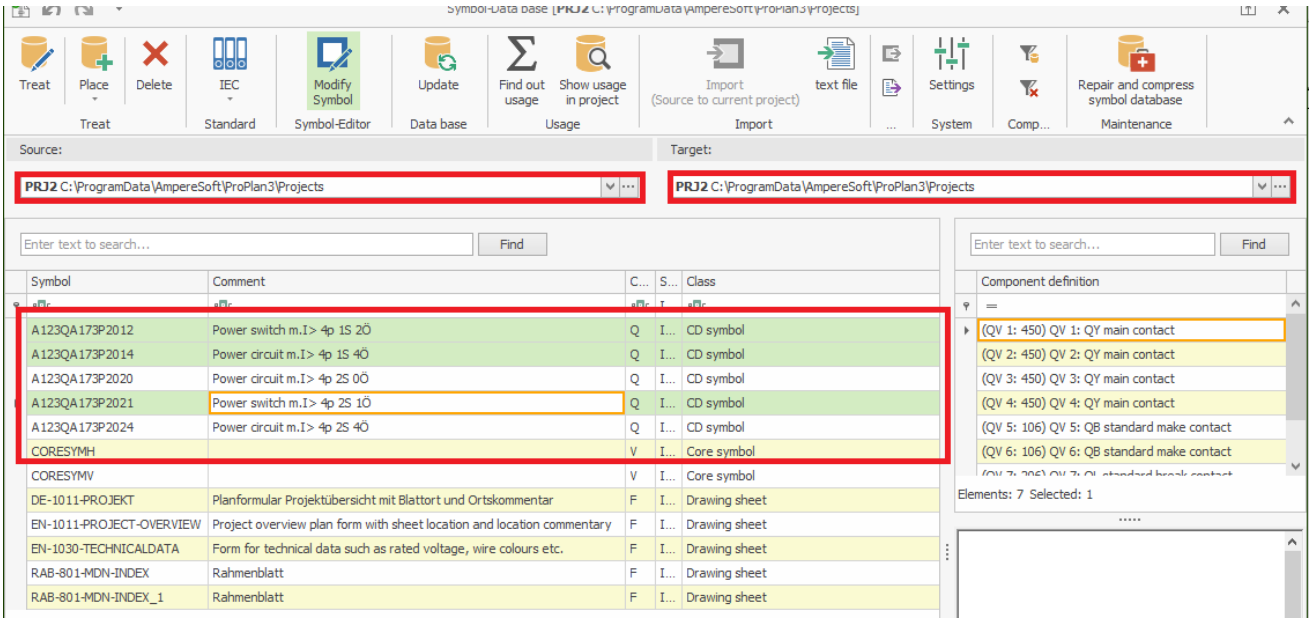
The "Technical Data" window has separate buttons for "Accept" and "Cancel". The "Accept" button saves all the settings you have made. "Cancel" closes the window without saving.



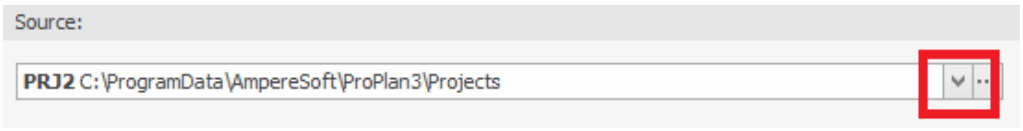
1.2.6. Symbol update of a ProPlan project

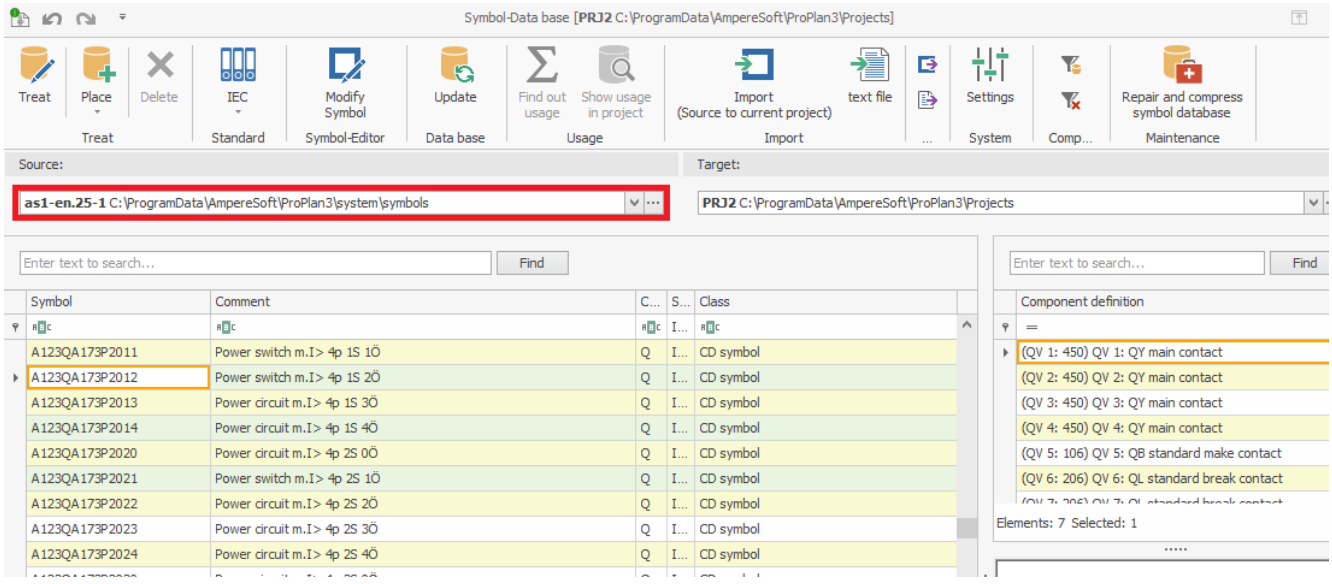
You can update old symbols from one project with current symbols from another project.

To do this, call up the symbol database of the old project Symbols old: For example, we want to update 5 symbols with the current symbol database AS1. To do this, we select the symbols

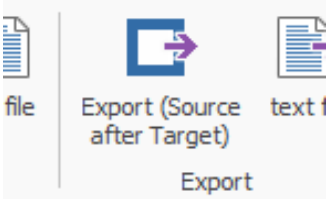


Then change the symbol database and go to the current central database AS1.





You will see that all symbols that you have marked in the Old Symbols project remain marked in the central symbol database. Then click on the Export button (source to destination).



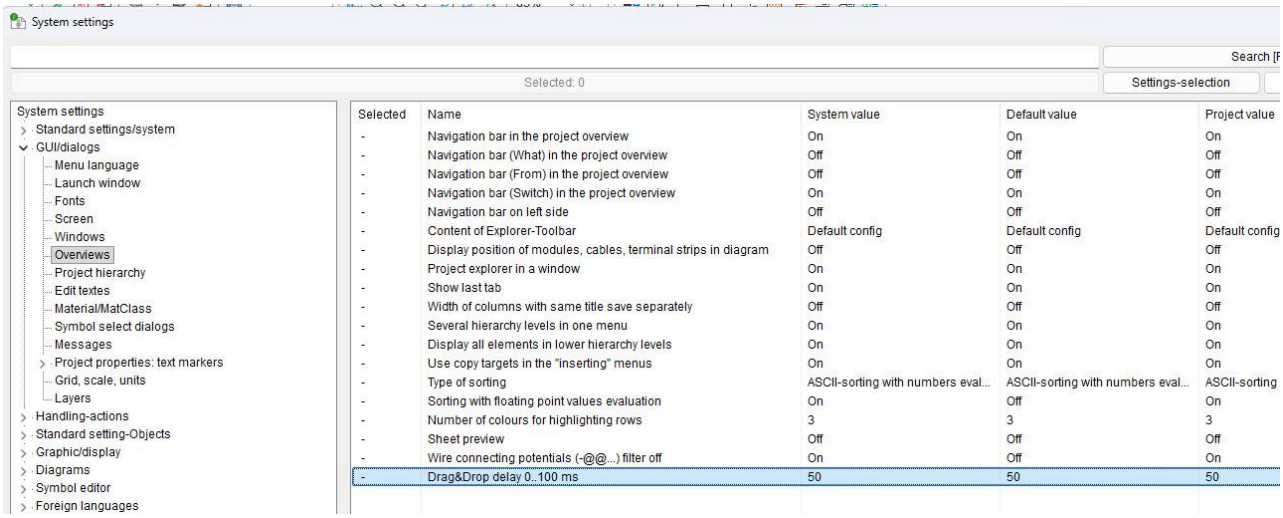
This means that only the marked symbols from the AS1 project are copied to the Old Symbols project.

1.2.7. Improvement of drag & drop speed from Project Explorer to graphics area

On some computers, the mouse moves very quickly when dragging from Project Explorer to the graphics area. The system settings now allow you to adjust the speed or delay yourself. Whole numbers from 0 to 100 are possible. The default value is 50.

This setting can be found in the system settings under:

User interface/Dialogues > Overviews > Drag & Drop Delay (0…100) ms.

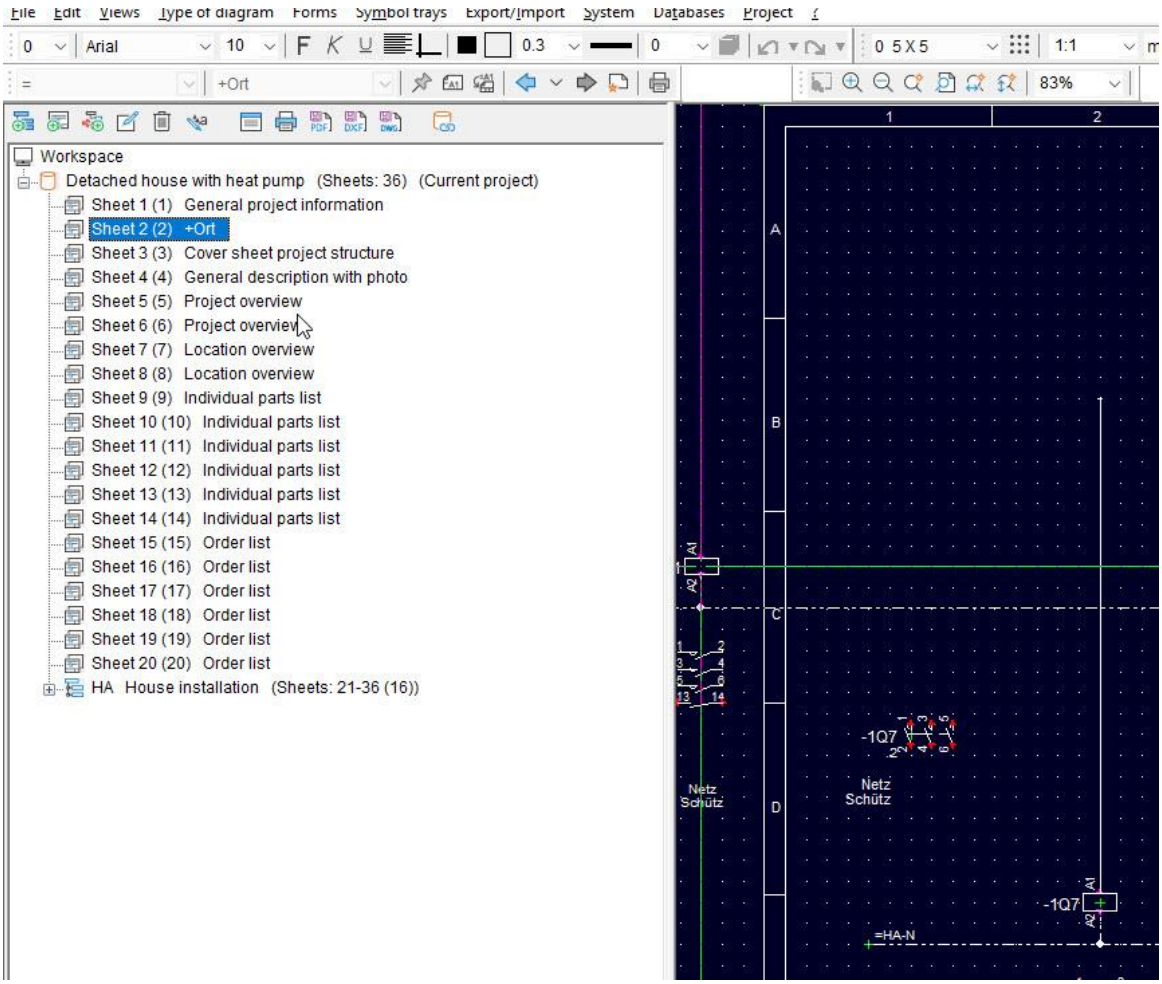


1.2.8. Improving the copying process with the new project hierarchy window

Copying sections or elements across sheets in a project is now much easier with the new project hierarchy window.

To do this, start the copy process and specify what you want to copy. To place the content on another sheet, simply go to the Project Hierarchy window (while the content is attached to the mouse) and select the target sheet with the mouse. The first mouse click gives the graphics window focus and the second click allows you to place the content.

In the example below, copy the entire output from sheet 1 circuit diagram to sheet 2. To do this, go to sheet 2 in the Project Hierarchy window and position the content.



1.2.9. Cross-reference tracking on a document generated by ProPlan

The cross-references now link to each other according to the logic used in ProPlan.

1.2.10. With XML-driven forms, it was not possible to group by sub-locations

You can now group the equipment according to the exact location where they are installed, main location or sub-location.

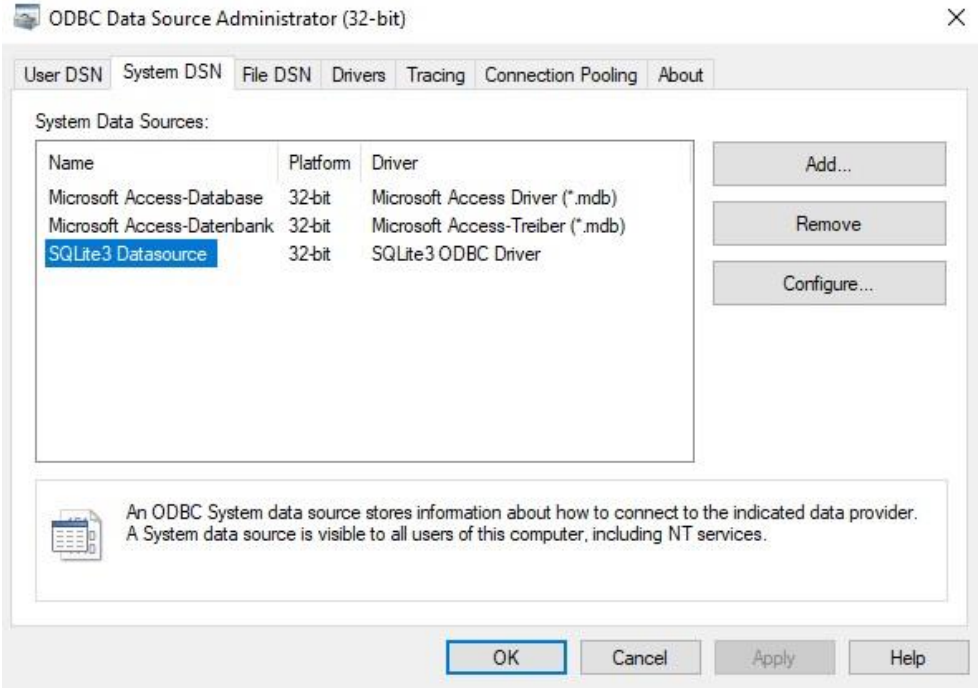
In the example, you can see the push buttons installed in the sub-location (.ST) of the main location (+AB).

single parts list with EQID, grouped by main location +AB.ST

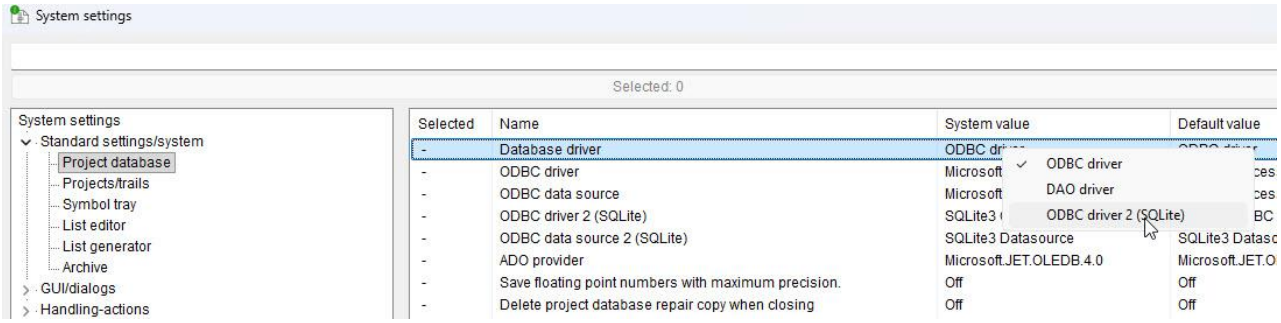
EQID	in CC	quantity	type	description	manufacturer	mounting location
=HA.AB-B14		1	2194 10		GIRA	+AB,ST
=HA.AB-E23		1	84105K3		BEGA	+AB,ST
=HA.AB-E24		1	84105K3		BEGA	+AB,ST
=HA.AB-E25		1	84105K3		BEGA	+AB,ST
=HA.AB-E26		1	84105K3		BEGA	+AB,ST

1.2.11. When installing the programme setup, the SQLite driver is also installed

Since the last version, we have been offering an alternative SQLite driver as an alternative to MS Access as a data format. The SQLite3 ODBC driver is installed by installing the programme setup and set up in your Windows.

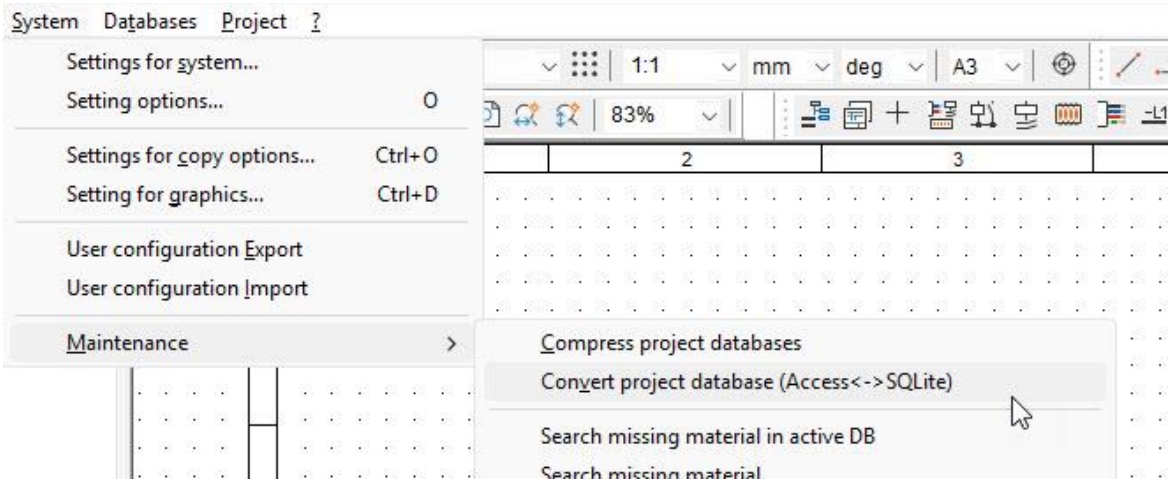


Now that we have the SQLite driver, we can convert the project databases from Access to SQLite in ProPlan.



To do this, you must set ODBC Driver 2 (SQLite) in the system settings under **Standard settings/system > Project Database > Database Driver** and then close the settings window again.

From this point on, all newly created projects will be based on SQLite. However, if you want to convert existing projects with MS Access as the database to SQLite, go back to **System > Maintenance** and then click on **Convert Project Database (Access <> SQLite)**.



2. AmpereSoft MatClass

2.1. Improvements in the application

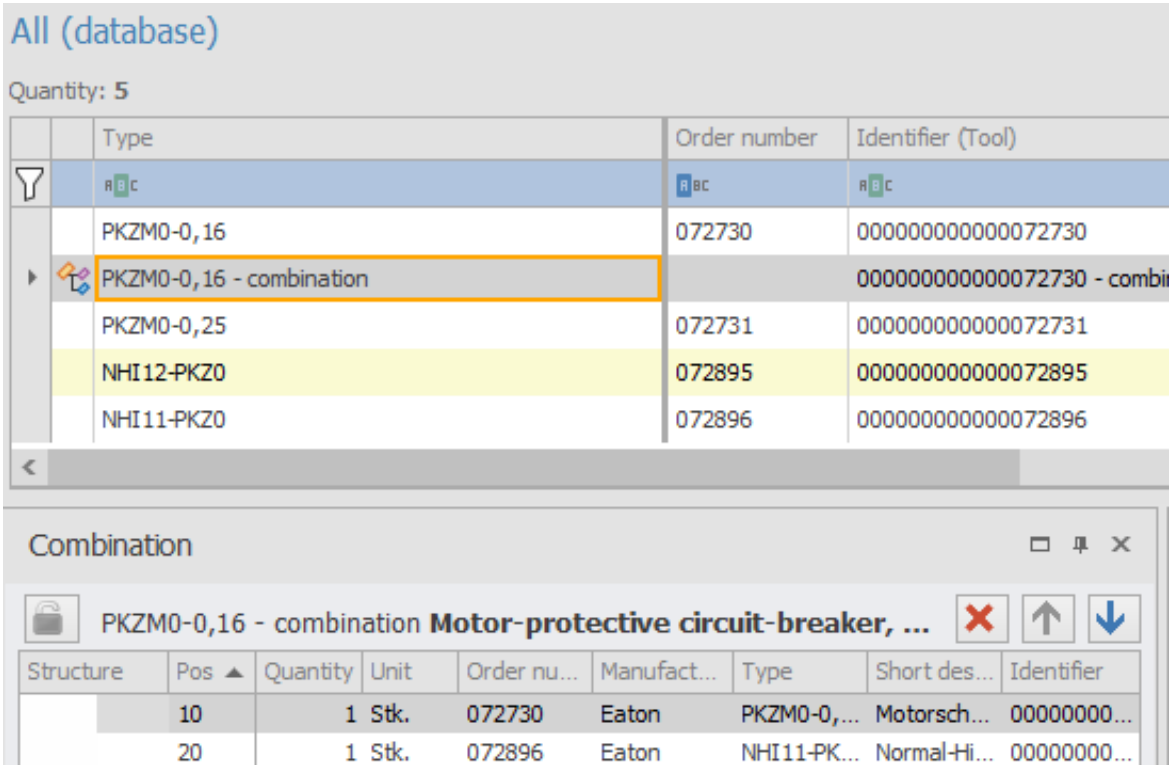
2.1.1. Material substitution in material combinations

You now have the option of replacing individual material entries in an existing material combination with new ones. This may be necessary if individual materials have been changed by the manufacturers, for example, or are no longer available.

Proceed as follows:

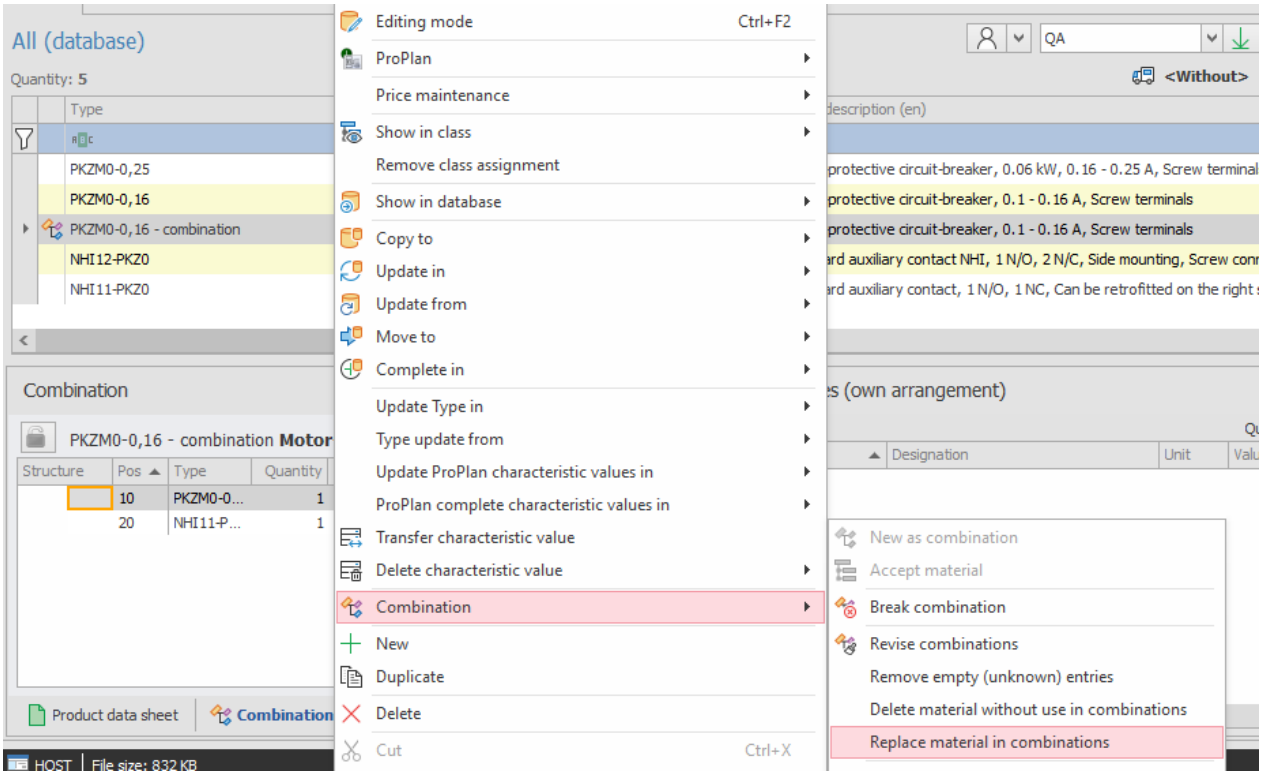
Select the material combination in which a material is to be replaced (you can also select several material combinations in MatClass; the changes will then be made in all combinations).

In the context menu (or in the main menu), select "Combination"->"Replace material in combination".

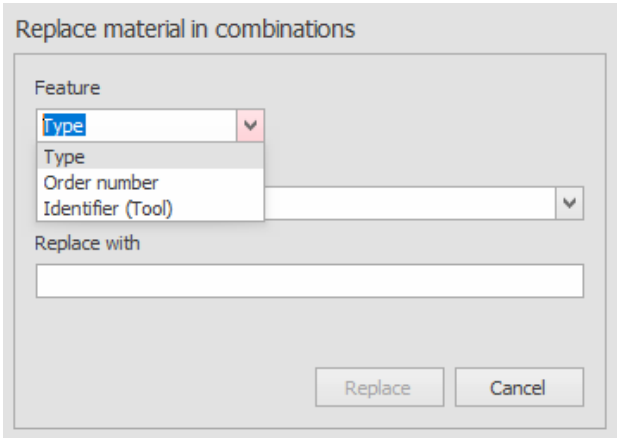


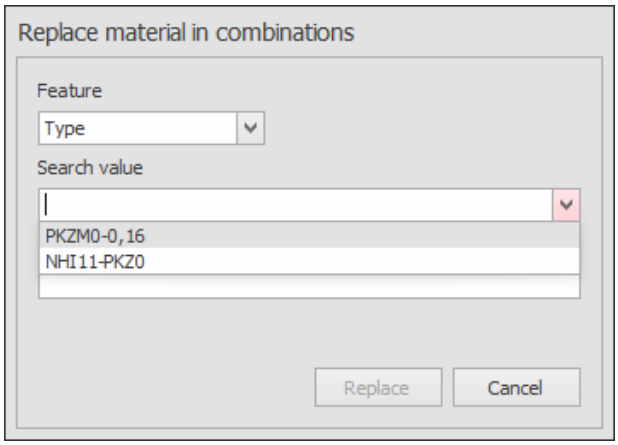
In this example, we want to swap two selected combinations, auxiliary contact NHI11-PKZ0 for NHI12-PKZ0.

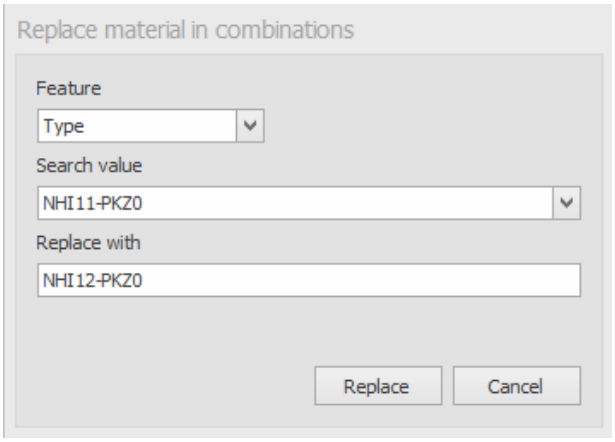
Then go to one of the selected combinations, right-click and go to the Replace combinations line.



The lower window will appear. First, select the characteristic. The default setting is "Type".







In the next step, select the material you want to replace. For ease of use, the pull-down menu shows all materials from the combinations you previously selected.

To replace item NHI11-PKZ0 with NHI12-PKZ0, click on the Replace with line and select the counterpart NHI12-PKZ0 from the material database. Your selection will automatically be entered in the field. Finally, click on the Replace button.

For combinations that have already been used, a window appears with the confirmation Yes/No.

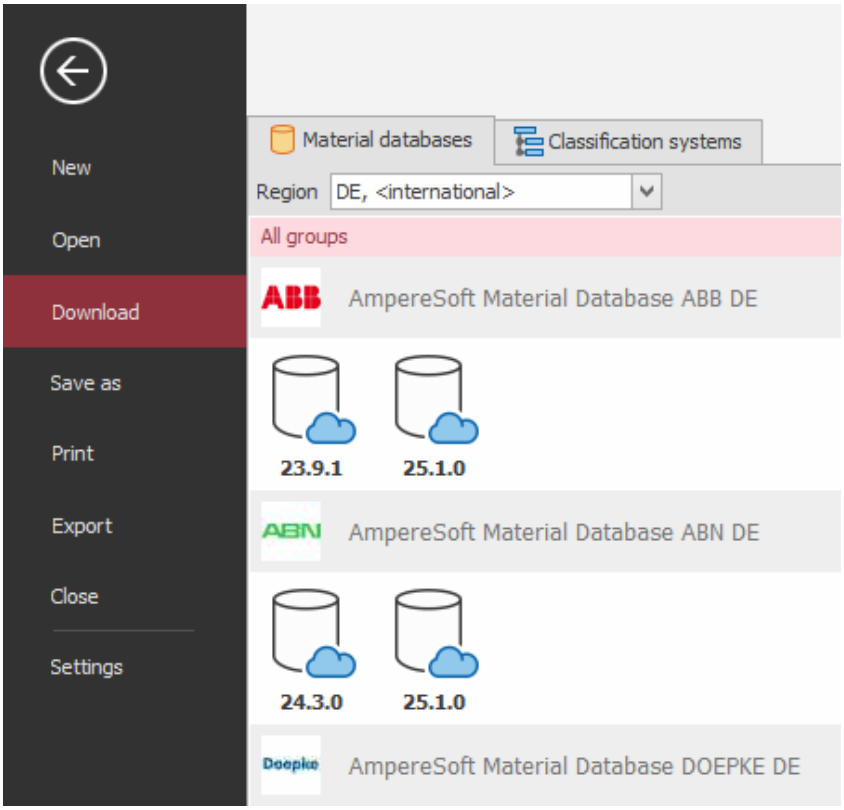
2.1.2. New feature “Reference quantity for surcharges” in MatClass

When importing BMEcat, the features "Quantity per list price" and "Quantity per net price" in MatClass are both filled with the same value "Quantity per price" from the BMEcat file. If you then import additional list or net prices with your own quantities, it was previously impossible to see which quantity the metal surcharges refer to.

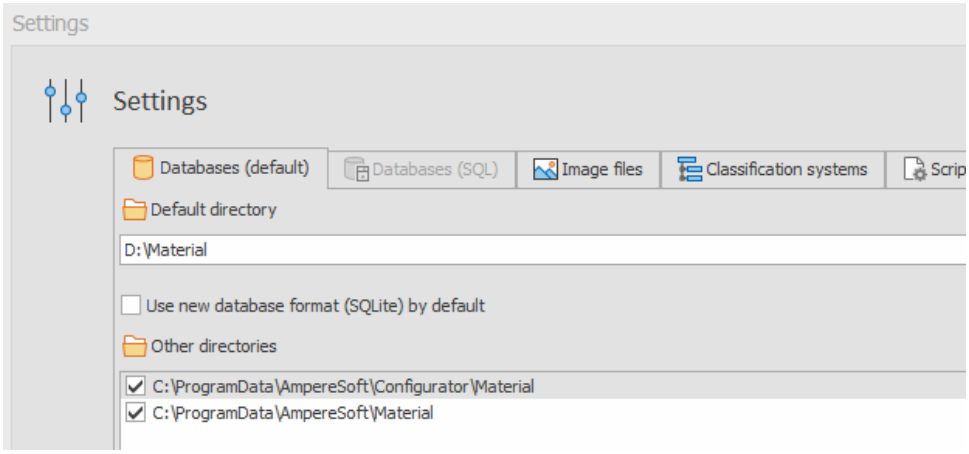
The new MatClass feature "Reference quantity for surcharges" is now also filled during BMEcat import and can continue to provide the correct quantity for calculating metal surcharges after "Quantity per list price" and "Quantity per net price" have been changed during price maintenance.

In the inventory databases, the "Reference quantity for surcharges" feature has the default value 1. For information on adjusting the calculation in QuotationAssistant, see section **Fehler! Verweisquelle konnte nicht gefunden werden.** on page **Fehler! Textmarke nicht definiert.**.

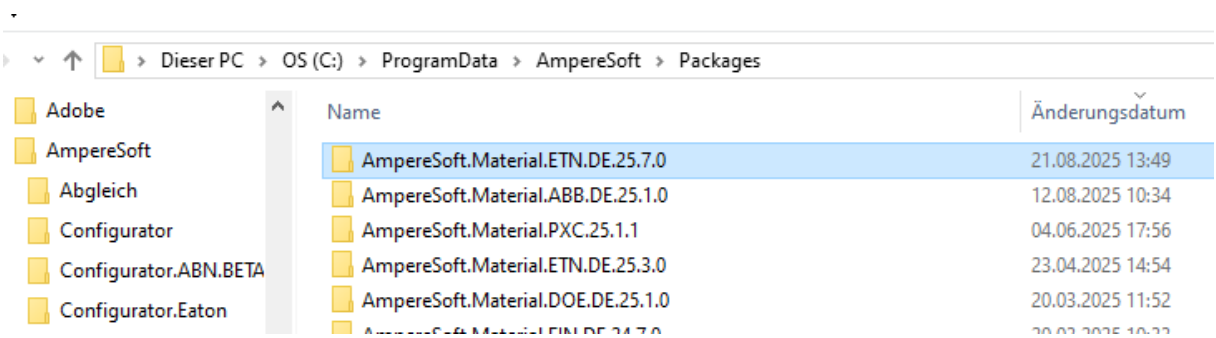
2.1.3. Downloading manufacturer databases to the specified user path



The material databases are installed on the path you have specified. For example, if you have specified a directory on the server, your databases will be installed directly on the server.



However, the compressed NUGET packages remain stored on drive “C:”.

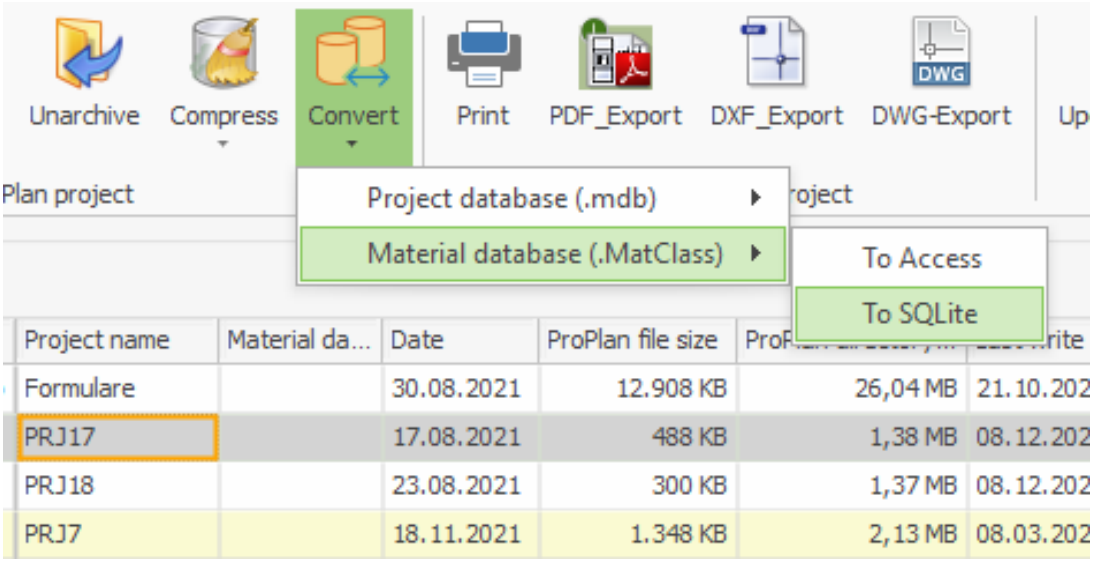


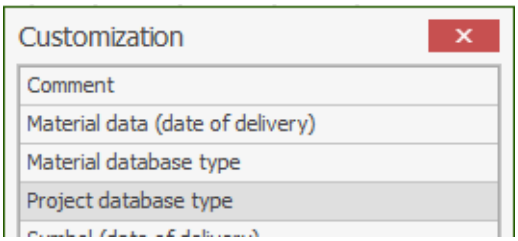
3. AmpereSoft ToolDataManager

3.1. New functions

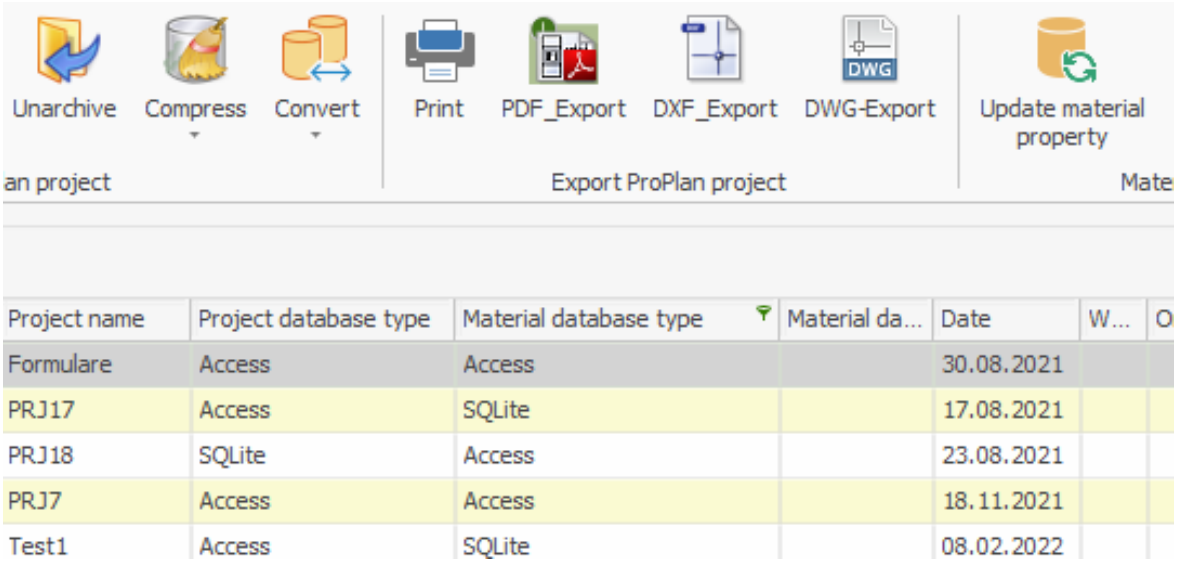
3.1.1. Converting ProPlan projects from MS Access to SQLite and vice versa

With the new ToolDataManager version, you can now use the Convert menu item to convert your ProPlan projects from MS Access to SQLite or vice versa from SQLite to MS Access. Here you select the format into which you want to convert ProPlan projects or MatClass databases individually.





To keep you informed about the data format used by the project database and MatClass database, there are two columns under Column Selection, Project Database Type and Material Database Type, which you can display.



4. AmpereSoft QuotationAssistant

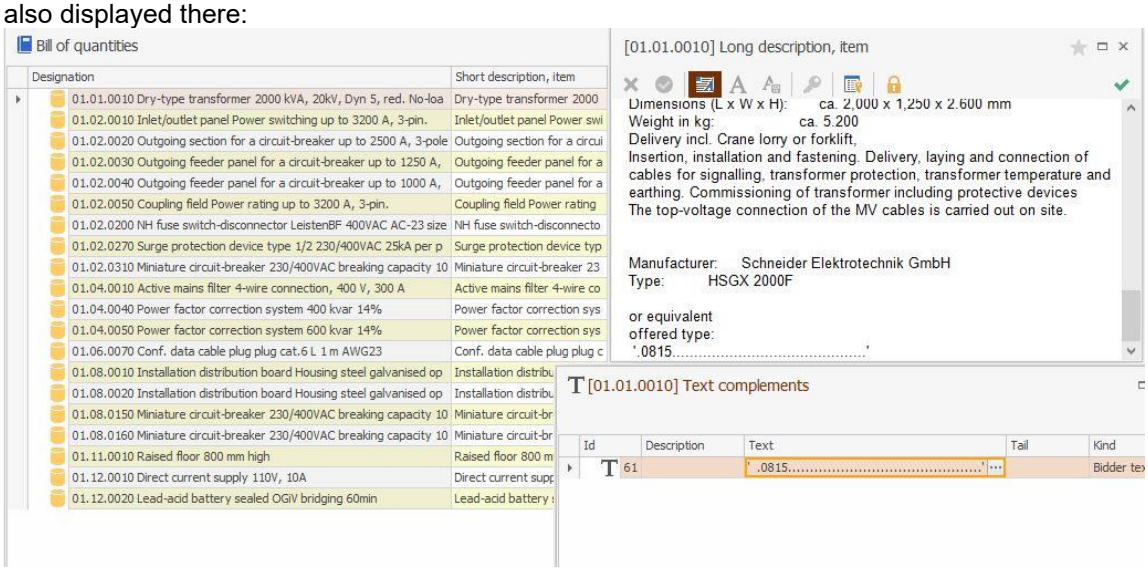
4.1. New functions

4.1.1. When importing GAEB83, the text additions are imported

The GAEB standard allows bidders to add text to the long texts of the items. This allows them to query the type designation or technical data of the product being offered, for example.

The remaining texts cannot be changed by the bidder, are locked after a GAEB import and are not transferred when the bid is submitted.

When importing a GAEB file with bidder text additions, these are listed in a separate characteristic for each item. A text key is inserted at the appropriate places in the imported long text so that the entered values are also displayed there:



The text additions entered here are then included in an .X84 file when the quotation is exported.

4.1.2. QuotationAssistant now features a new characteristic: Reference quantity for surcharges

The metal surcharges in QA are actually calculated based on the ETIM guideline. However, this guideline only recognises one property, "quantity per price", whereas MatClass distinguishes between "quantity per list price" and "quantity per net price". In version 24.1, the "calculation type" feature was used for each surcharge to decide which quantity the surcharge refers to. However, the disadvantage of this is that the calculation type is only specified if the surcharges are calculated as a percentage and not by weight, and the feature was only introduced in guideline 2.2 and is not yet supported by MatClass. In this case, the "quantity per list price" is taken as the default value.

This creates a problem for users whose material data has been maintained in such a way that the metal surcharges refer to quantity 1, while the "quantity per list price" remains at the value >1 specified by the supplier. Without changing the database, the QA determines the metal surcharge to be lower than before after this change.

However, simply resetting the calculation to the fixed reference value of 1 for the surcharges is not good for users whose surcharges are based on the quantity per price according to the ETIM guidelines. Unfortunately, there is no simple solution for both user groups and all databases.

To address this issue, the new feature "Reference quantity for surcharges" has been added. Surcharges are now calculated based solely on this new feature and are no longer dependent on "Quantity per list price" and

"Quantity per net price". A default value of 1 restores the behaviour of QA prior to version 24.1 for existing projects. If surcharges are imported according to the ETIM guidelines, the quantity per price can be entered there so that surcharges can also be calculated correctly in this case for newly imported databases.

However, users with existing projects that were maintained for calculation in version 24.1 must check their projects. Here, the three quantities can be compared in the overview and values can be transferred if necessary. The quantities can be transferred to MatClass via mass maintenance.

4.2. Improvements in the application

4.2.1. The "Update from" function in the context menu is no longer restricted.

In the system settings, under "Import/Export Settings, System", there is an option called "Update material during import". If you deactivate this option, existing material in the project will not be updated when you retrieve it again from MatClass. However, if you call up an update using the context menu under "Update from", an update will always be performed regardless of the system settings.

5. Various improvements/bug fixes

5.1. Bug fixes in AmpereSoft ProPlan

- For large projects > 5000 sheets, a crash occurred when generating forms or exporting PDF files. The memory leak has been located and fixed.
- When opening ProPlan after installation on a new computer, PP and ToolSystem projects are displayed together in the Backstage history window.
- When overwriting an image used in a ProPlan project, a warning should appear.
- TC export - ProPlan crashes when selecting multiple locations (to be combined into a cabinet).
- The parts list forms see the debited/sold single-pole symbol as a separate BM.
- If the connection texts are changed for a debited single-pole symbol, ProPlan crashes.
- Incorrect form type stored for the "Wire labelling" form.
- Black and white PDF output in combination with reference image will continue to be output in colour.
- Attach new sheet when generating forms
- The "Wires" function in the context menu of a cable did not work.
- When attempting to display the wires via the context menu of a cable, either nothing was displayed or the wires from the previous cable were listed. This error has been fixed.
- The wires are always displayed correctly in the Project Explorer.
- The netlist is now available in German in the "Forms" menu. The entry can now also be changed in the system settings under "Plans>Standard Forms".

5.2. Bug fixes in AmpereSoft MatClass

- MatClass crashes when an invalid company-specific layout file is used.
- ProPlan does not start MatClass in 32-bit mode. To start MatClass, the Access driver for 64-bit should be installed or the 32-bit checkbox should be selected on the MatClass start screen.
- After converting from SQLite to Access, compression is no longer possible.

5.3. Bug fixes in AmpereSoft QuotationAssistant

- In the form provided for issuing quotations, the field for the page number has been updated so that it displays the correct total number of pages when used in output configurations.
- When creating an empty project (without a template), a standard OZ mask was created that could no longer be deleted or overwritten. This could lead to an incorrect OZ mask, especially when importing GAEB without a template.
- The Excel export had a problem updating the project content. Once it was called up, it only exported the data from the state the project was in at that point in time. Changes made after that could only be exported after restarting the QA.

6. Update history

Update information since 2008 (ProPlan V2.0)

Information on the latest updates can be downloaded as a PDF from the following links:

- UpdateInfo V2.0
- UpdateInfo V2.2
- UpdateInfo ProPlan V3.0
- UpdateInfo ProPlan V3.1
- UpdateInfo ProPlan V3.2
- UpdateInfo ProPlan V3.3
- UpdateInfo ProPlan V3.4
- UpdateInfo ProPlan V3.5
- UpdateInfo-ProPlan V3.6
- UpdateInfo ToolSystem V2015.1
- UpdateInfo ToolSystem V2016.1
- UpdateInfo ToolSystem V2016.2
- UpdateInfo ToolSystem V2017.1
- UpdateInfo ToolSystem V2018.1
- UpdateInfo ToolSystem V2020.1
- UpdateInfo ToolSystem V2021.1
- UpdateInfo ToolSystem V2022.1
- UpdateInfo ToolSystem V2023.1
- UpdateInfo ToolSystem V2024.1
- UpdateInfo ToolSystem V2025.1