Anlagenverbinder 10 to EEP 17 – Expert Stand: 10.12.2021

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Short overview

The Anlagenverbinder 10 with its integrated model replacement module is an official add-on program for "EEP 17" compatible from version 17.0 onwards. It allows you to link two separate EEP layouts with each other, to replace non-existent models with models in your inventory and to list missing models in *.txt format.

Please note that Anlagenverbinder 10 supports the file format of EEP layouts from version 7.0 onwards. Layouts built with earlier EEP versions must first be loaded into the current EEP version and then be saved to be automatically converted to the latest format. This is not only necessary due to the change in file format (*.GSB to *.3DM), but also due to various functional changes. These will only be taken into account for layouts created with Eisenbahn.exe Professional 7.0 - 17.0 after their automatic conversion. Beyond the various functional changes there are features such as special tracks for moving cameras, moving cameras, extended model functions (up to 20 flares), signals with up to 20 positions, but also the so-called omegas.

System requirements

An installed and registered EEP 17 version.

- A dual-core processor from 2.5 Ghz
- A graphics card supporting Pixelshader 3.0.
- 2 GB RAM
- The following operating systems are supported:
 - Windows Vista ~
 - Windows 7 ~
 - Windows 8 ~
 - Windows 10
 - Windows 11

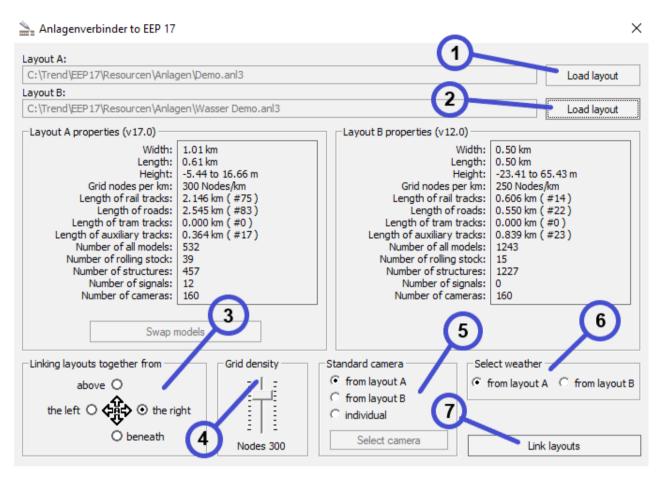
How the Anlagenverbinder works

As the German name suggests, it is designed to link two separate EEP 17 layouts together to form a single layout. The merged layouts can have different sizes (length x width x height) and different grid densities (number of nodes). The new installation created by the joining of two existing layouts has in principle the geometric shape of a rectangle. The grid density of this new layout corresponds to the highest grid density of the two linked layouts. If the grid density of the newly created layout reaches the maximum number of 1,000,000 nodes supported by EEP 17, the number of nodes is automatically reduced to the nearest possible lower value.

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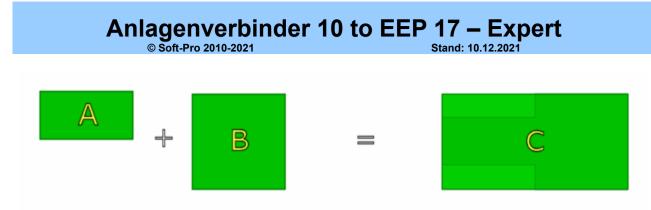
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EEP 17 - linking layouts

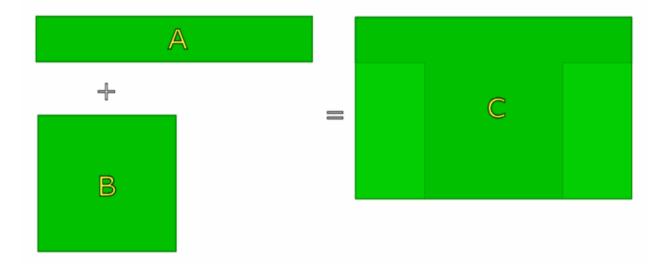


The picture above shows the main window of the Anlagenverbinder and at the same time the successive steps of the linking procedure:

- 1. Click on **Load layout (1)** to select the first layout you want to link. By default the folder "Anlagen" in the EEP17 directory opens. If your EEP 17 layouts are located in another folder, please select the corresponding path. When layout A, i.e. the first installation, is selected, scanned and loaded, the complete path and other characteristics of layout A are displayed.
- 2. Now click on the second **Load layout (2)** icon to select and load the second layout file that you wish to link to the first one. The full path to this second layout and its characteristics are displayed too.
- 3. Under **Linking layouts together from (3)**, select the edge of the layout A that has to be linked to layout B. The layout can be linked by the left, the right, the top or the bottom. In principle, the link is made in such a way that the respective edges are centred, regardless of the length and width of the two layouts. The following examples illustrate how two layouts with different sizes are connected.



Example 1: Layout A (2 x 1 km) is linked to layout B (2 x 2 km) by the right-hand edge. The result of this merging is layout C with following dimensions: $4 \times 2 \text{ km}$. As mentioned before, the result of this merge is in principle a rectangular area. The light coloured areas in the illustration above were generated during the merging process and can also be used and constructed in EEP17



Example 2: Layout A (5 x 1 km) is linked to layout B ($2.5 \times 2.5 \text{ km}$) at the bottom edge. The result of this merging is layout C with following dimensions $5 \times 3.5 \text{ km}$. The light coloured areas in the above illustration were generated during the merging process and can also be used and constructed in EEP17.

- 4. The **Grid Density (4)** slider can be used to reduce the grid density of the new layout to be created, if necessary. Please note that the permitted grid density in EEP 17 is limited to 1,000,000 grid points. This means that in most cases the grid density of the resulting layout C is lower than the one of the original layouts A and/or B.
- 5. Under Standard camera (5), you have the option to keep the positions of the saved camera positions from layout A and/or B. If you choose the individual option, you can define a new list of camera positions by clicking on the Select camera icon. Select the saved camera positions in layout A and B and transfer them to the list of cameras that will be included in the merged layout by using the corresponding arrow. In EEP17, the number of camera locations that can be saved is limited to 180 static and 180 dynamic cameras. After selecting the different camera locations, click on the Place cameras icon to include these cameras in the new layout to be created and close the dialogue.

However, there is no limit to the number of the new mobile cameras that can move along the system tracks. When merging two layouts in the EEP 17 format, all the new mobile cameras are included, regardless of the number of these cameras in your layout A and layout B!

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Anlagenverbinder to EEP 17

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- 6. The **Select weather (6)** suggests that the weather areas stored in the layouts to be merged can be included in the final layout. However, this cannot be done at this stage.
- 7. Clicking on the **Link layouts (7)** icon opens a dialogue box in which you save the new layout resulting from the merging process. The "Anlagen" folder in EEP17 is selected by default, but you can specify another save path. Depending on the size of the layout and the number of models present, the saving process may take some time. It should also be noted that the new layout created with the Anlagenverbinder adopts the file format of EEP 17 and therefore cannot be loaded into earlier versions of EEP!

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The model swapping tool

Thanks to this tool, you can now use the layouts made by others, even if the models they use are not part of your inventory. How do you do this? By simply replacing the models you don't have with models you have in your inventory. This is made possible by the **Model swapping tool**. You can also use the model swapping tool to easily replace existing models in your own layouts with new models.

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To use the model swapping tool, you must first load a layout into the Anlagenverbinder:

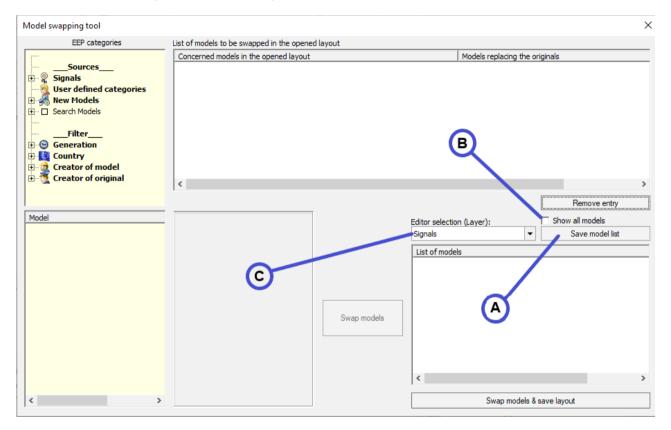
- 1. Click on the **Load layout (1)** icon to select a layout. By default, the "Anlagen" folder in the EEP17 directory opens. If you have saved your layout in another folder, select the corresponding path. Once the desired file has been selected, scanned and loaded, the complete path and its characteristics are displayed.
- 2. Once this layout has been loaded and the models within it have been analysed, click on the **Swap models (2)** icon to open the **Model swapping tool**. The workspace is divided into a number of areas which display their items in list form. On the left-hand side there is a tree structure which should be familiar to you as it corresponds to the one in EEP 17. Both the Anlagenverbinder program and its Model swapping tool use the structure and files from EEP17.

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Before explaining how the **model swapping tool** works, we would like to highlight the significant effect that the **Show all models (B)** checkbox has on the items displayed and on the overall operation of this tool. If you check the box and thus activate the option, all models in your inventory will be displayed, whereas if you do not check the box, only the missing models will be listed. Depending on whether you enable or disable the option, you can therefore display the list of owned models or the list of missing models.

<u>Tip:</u> In order to avoid confusion, it is advisable to always check whether the **Show all models** option is activated. We also recommend that you regularly scan your models in EEP 17, as only scanned models are considered available in your model inventory.



Swapping missing models

Create a list of missing models:

If you have loaded a layout with models that are not installed at your location, you can obtain a list of all missing models by clicking on the **Save model list (A)** icon. The list in *.txt format is saved in the EEP 17 "Anlagen" folder and provides information on the occurrence of the missing models in the loaded layout as well as their installation path in the EEP 17 "Ressourcen" folder according to the information stored in the layout file.

Example of a missing model list content:

```
[Structures]
File_1 = "(2 Element) \Immobilien\Verkehr\Verkehrszeichen\BU_Barke1.3dm"
File_2 = "(2 Element) \Immobilien\Verkehr\Verkehrszeichen\BU_Barke3_beschrankt.3dm"
File_3 = "(2 Element) \Immobilien\Verkehr\Verkehrszeichen\BU_Barke3_beschrankt.3dm"
File_4 = "(1 Element) \Immobilien\Sehenswert\Schloesser\Welcome_to_EEP15.3dm"
[Tracks]
File_1 = "(3 Element) \Gleisstile\Strassen\System\Lstrasse_3_West_SM2.sys"
File_2 = "(8 Element) \Gleisstile\Strassen\System\Farm_Rye_Track_SM2.sys"
```

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Creating lists of missing models is particularly useful for very large layouts with several thousand models, as it speeds up the process of swapping missing models by providing easy access to the different categories.

Swapping missing models

As with the list of missing models in *.txt format (which you are of course free to print out), the missing models, sorted by editor, are also displayed in the bottom right-hand corner of the model swapping tool. For example, there is a classification by signals, landscape elements, structures, goods, rolling stock and tracks.

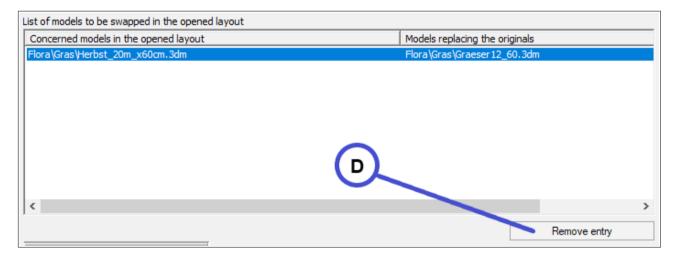
Missing models are highlighted with a question mark in square brackets [?], which corresponds to their appearance in the 3D window of EEP17.

Using the relevant **Editor selection (layer) (C)** drop-down menu, you can select the editor in which the missing models to be displayed are categorised.

To swap a specific missing model, you must first select the corresponding entry in the list of missing models. Then you can select the replacement model from the EEP 17 directory (yellow area on the left side of the swapping tool). Once you have selected the model to be swapped and its replacement model, the **Swap models** icon becomes active and you can confirm your choice.

What happens now? The missing model entry is removed from the **list of models** and appears now in the **List of models to be swapped in the opened layout** (top of the module). As you can see, the models selected are not swapped straight away. The swapping operations listed in the upper part are only executed after clicking on the **Swap models & save layout** icon.

This has the advantage that each swapping instruction can be undone without problems until the layout is finally saved. If you decide to use another replacement model, simply select the corresponding entry in the **list of models to be swapped in the open layout** and then click on the **Remove entry (D)** icon. The swapping instruction related to the selected model disappears and the missing model is displayed again in the **List of models** below.



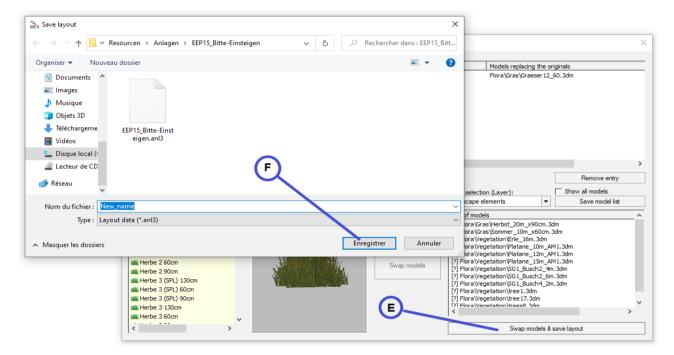
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At this point, we should pay attention to certain points that must be taken into account when swapping models:

- Models can only be swapped by models of the same category. That means, only signals can be replaced by signals, structures by structures, landscape elements by landscape elements, rolling stock by rolling stock, etc.
- 2. When swapping rolling stock, it must also be taken into account that vehicles with engines can only be replaced by other vehicles with engines, and vehicles without engine can only be swapped with other vehicles without engine. A wagon (without engine) can therefore not be replaced by a locomotive (with engine).

Once you have swapped the missing models as desired, click on the **Swap models & save layout (E)** icon. A new window will appear, allowing you to give the layout a new name as well as defining the path where to save it. The given name must be different from the original layout. As soon as you have confirmed with the **Save icon (F)** both windows close and you return to the main Anlagenverbinder window.



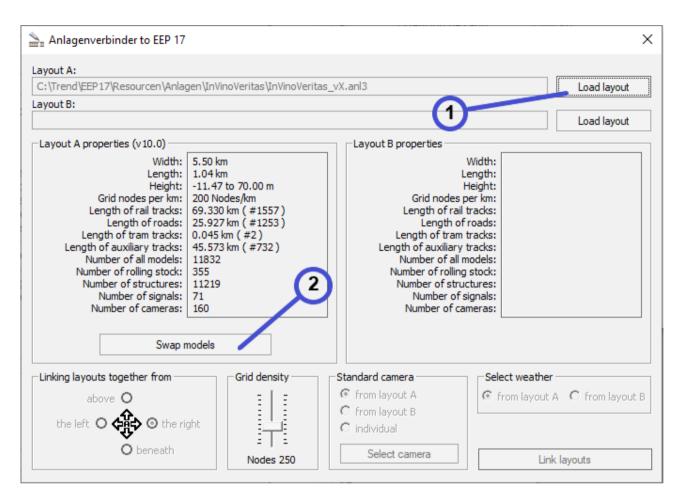
Swapping existing models

The model swapping tool can not only replace missing models, but also models you actually own and use in a layout. This can be useful, for example, if track styles are to be exchanged or if landscape or background elements with a two-dimensional appearance are to be replaced by models with a greater depth effect.

As with the swapping of missing models, you must first load a layout into the Anlagenverbinder. Select and load the layout by clicking on the **Load layout (1)** icon, click on the **Swap models (2)** icon to open the model swapping tool.

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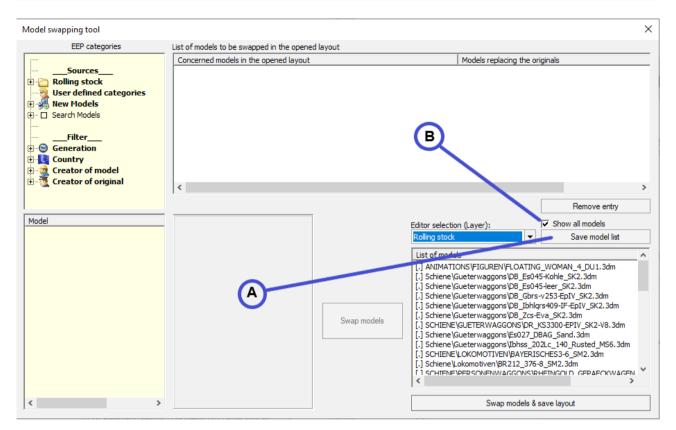
In this tool activate the **Show all models (B)** option by checking the corresponding box. You can then generate the list of models used in your layout by clicking on the **Save model list (A)** icon.

The list in *.txt format, which contains all the models and elements used in the layout, is stored in the EEP 17 "Anlagen" folder. It contains information on the occurrence of the various used models as well as their installation path in the EEP 17 "Ressourcen" folder.

The replacement of existing models is done in the same way and according to the same rules as the swapping of missing models:

- Models can only be swapped by models of the same category. That means, only signals can be replaced by signals, structures by structures, landscape elements by landscape elements, rolling stock by rolling stock, etc.
- 2. When swapping rolling stock, it must also be taken into account that vehicles with engines can only be replaced by other vehicles with engines, and vehicles without engine can only be swapped with other vehicles without engine. A wagon (without engine) can therefore not be replaced by a locomotive (with engine).

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The only visible difference between these two swapping procedures is in the way the models are highlighted. While the missing models are preceded by a [?], the models used in the layout are preceded by a dot in square brackets [.]

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Once you have swapped the models as desired, click on the **Swap models & save layout (E)** icon. A new window will appear, allowing you to give the layout a new name as well as defining the path where to save it. As soon as you have confirmed with the **Save icon (F)** both windows close and you return to the main Anlagenverbinder window.

Finally, we would like to thank you for purchasing the Anlagenverbinder 10 for EEP 17 and wish you a lot of fun with this program.

If you have any technical questions, problems or suggestions, please contact

https://hilfe.eepshopping.de

Best regards The Soft-Pro development team