Manual to Plug-in 2 for EEP 16.2

Dear customers, first of all we would like to heart-fully thank you for purchasing EEP 16.2 Plug-in 2.

This plug-in includes both improvements and new functions. For this reason, we invite you to read the following information carefully and in particular the installation instructions.

Glossary:

Installation instructions

Please make sure that update #2 of EEP 16 is installed. This is the prerequisite for this plug-in. You can check this in the lower left part of the loading window. If your system is running on a 64-bit architecture, the mention (x64) will be added to the running version.

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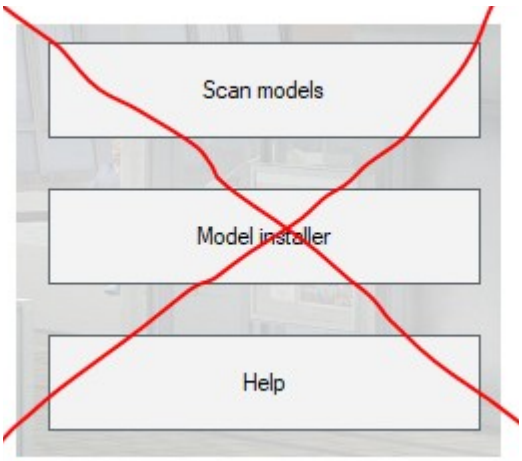


The Plug-in needs its own installer to upgrade, since it brings new features besides the new models. For this reason it is not possible to open this file directly via the "Model-Installer of EEP16.2

If necessary, please leave your EEP 16.1

Please start installing the Plug-in by double clicking on the file V16TSP10045 if you have purchased the Plug-in 2 for EEP 16.2 in its full version, on the file V16TSP10046 if you have purchased the Plug6in 2 for EEP 16.2 without additional models. A message informs you that this program will operate changes to your computer. Please allow this by clicking Yes to proceed with the installation. The installation window then appears and prompts you to accept the user license and once these steps are completed, the program then extends the functionality of your EEP 16.2

If the installation was successful, then you will see in the lower left part of the launch window the EEP 16.2 version followed by the mention Plugins 2

New models contained in Plug-in 2 for EEP 16.2:

Models with predefined docking points by the manufacturer

- Wall with top 3x3
- Wall with top 3x5
- Pillar with top 30
- Pillar with top 45
- Pillar with top 60
- Pillar with top 90
- Pillar with top 180
- Column with top
- Wall with top 3x2 and door
- Wall light
- Wall-mounted flowerpot with hanging plant

Some catenary masts have additional docking points which are defined by the plugin 2 :

DB K 2m5 0
DB K 2m5 -40
DB K 2m5 +40
DB K 2x2m25 0
DB K 2x2m25 -40
DB K 2x2m25 +40
DB K 2x2m25 +-40
DB K 2x6m75 0
DB K 2x6m75 -40

DB K 2x6m75 +40
DB K 2x6m75 +-40
DB K 4m0 0
DB K 4m0 -40
DB K 4m0 +40
DB K 6m75 0
DB K 6m75 -40
DB K 6m75 +40
DB K Pair 2m5 -40 +40
DB K Pair 2m5 +40 -40
DB K Pair 4m0 -40 +40
DB K Pair 4m0 +40 -40
DB K 2s 4m0
DB K L 2s 4m0

Configurable double masts of catenaries:

- Customizable cross span 8,5 m
- Customizable cross span 8,5 m (rusty)
- Customizable cross span 8,5 m with light
- Customizable cross span 12,5 m
- Customizable cross span 12,5 m (rusty)
- Customizable cross span 12,5 m with light
- Customizable cross span 16 m
- Customizable cross span 16 m (rusty)
- Customizable cross span 16 m with light
- RA 12 signal
- Projector for railway tracks (low)
- Projector for railway tracks (high)

Animated single and double junction crossings

- DKW 60-190-1:9 X Fz B 4.5m (DU1)
- DKW 60-190-1:9 X Fz H 4.5m (DU1)
- DKW 60-300-1:9 X Fz B 4.5m (DU1)
- DKW 60-300-1:9 X Fz H 4.5m (DU1)
- DKW 60-500-1:12 X Fz B 4.5m (DU1)
- DKW 60-500-1:12 X Fz H 4.5m (DU1)
- EKW 60-190-1:9 X Fz B 4.5m (DU1)
- EKW 60-190-1:9 X Fz H 4.5m (DU1)
- EKW 60-300-1:9 X Fz B 4.5m (DU1)
- EKW 60-300-1:9 X Fz H 4.5m (DU1)
- EKW 60-500-1:12 X Fz B 4.5m (DU1)
- EKW 60-500-1:12 X Fz H 4.5m (DU1)

New features allowed by Plug-in 2 of EEP 16.2:

The endless track on plane surfaces

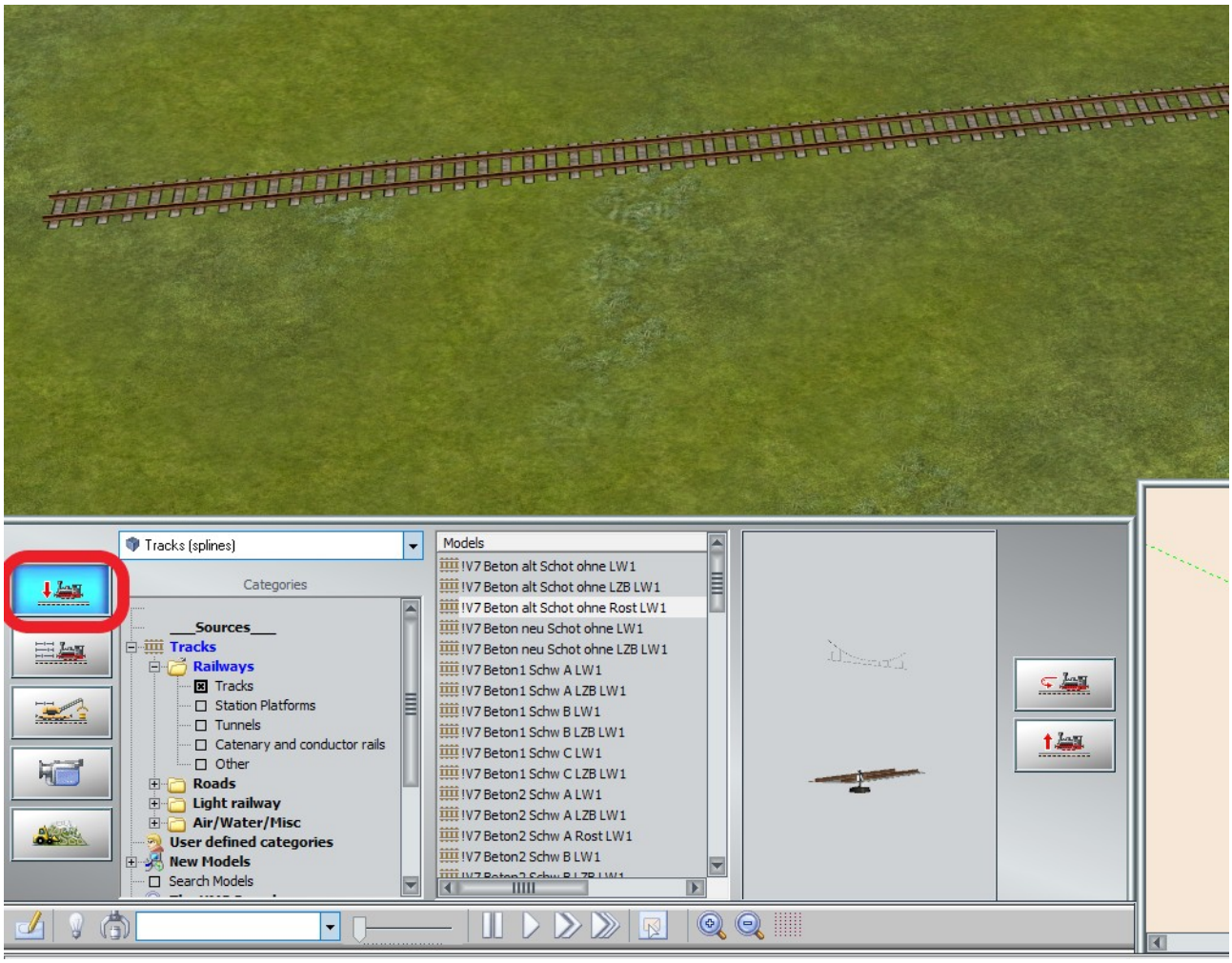
Important information:

This function is **only available in 3D editing mode and on a plane surface.**

This new feature allows you to build in a new and much easier way your railroads and streets, paths, rivers and streams.

Until now, you had to spend a lot of time laying one track after the other, but from now on, the whole track laying process is done automatically.

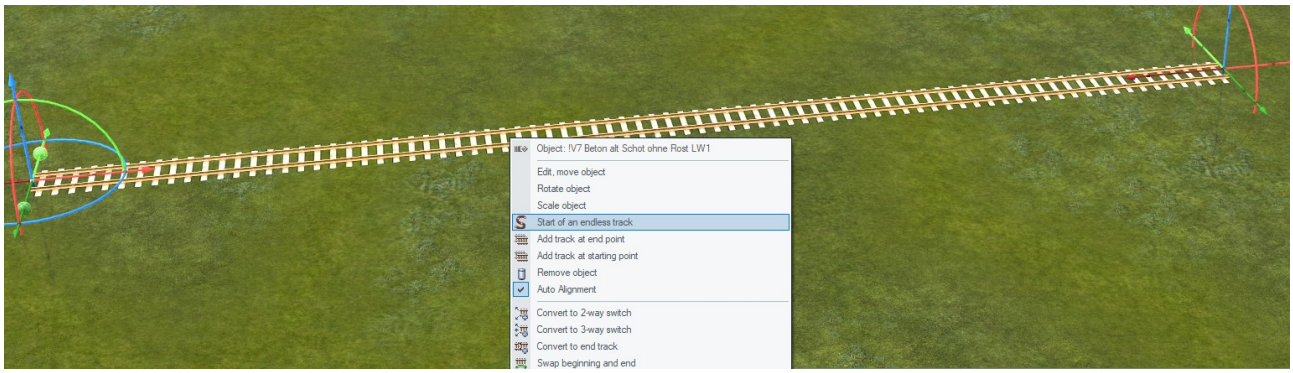
To switch to 3D editing mode, press



This function can be applied to any existing spline on your project.

If you wish to use this function while there is no track on your project, you must first install one.

Once done, simply right-click on the rail (or any other track) and activate the new function "Start of an endless track":

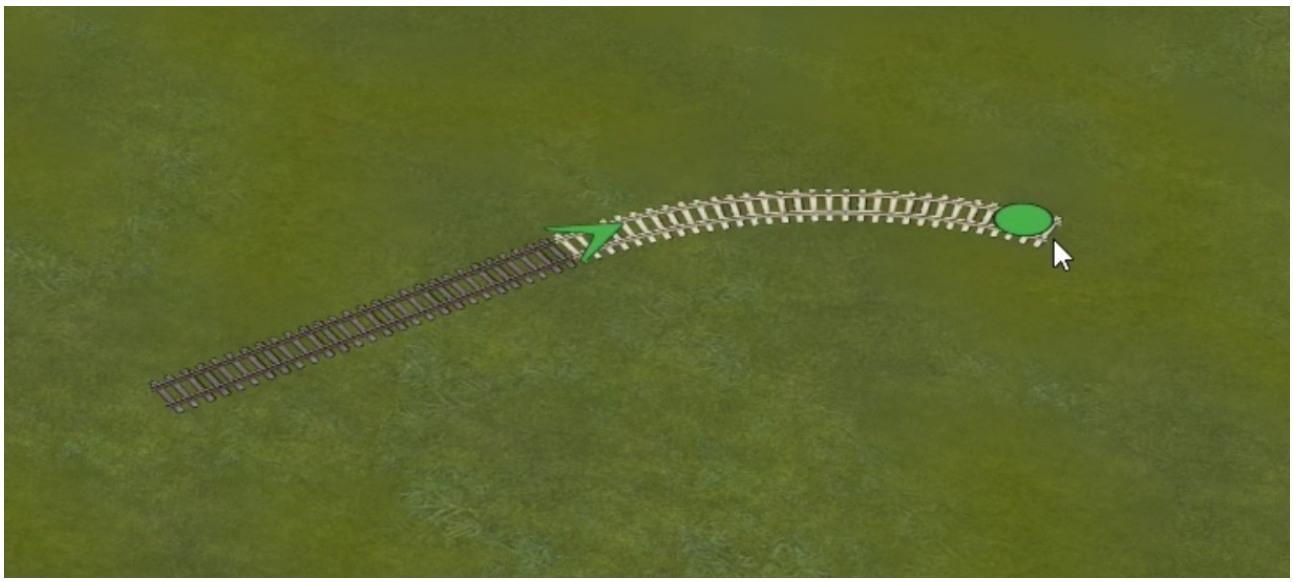


At the end of the selected rail section, a new very short rail appears and automatically follows the mouse cursor.
This new rail flashes alternately from dark to light.

In this mode, it is not necessary to hold down the mouse button when you bend the track.

The end of the track follows the mouse cursor.

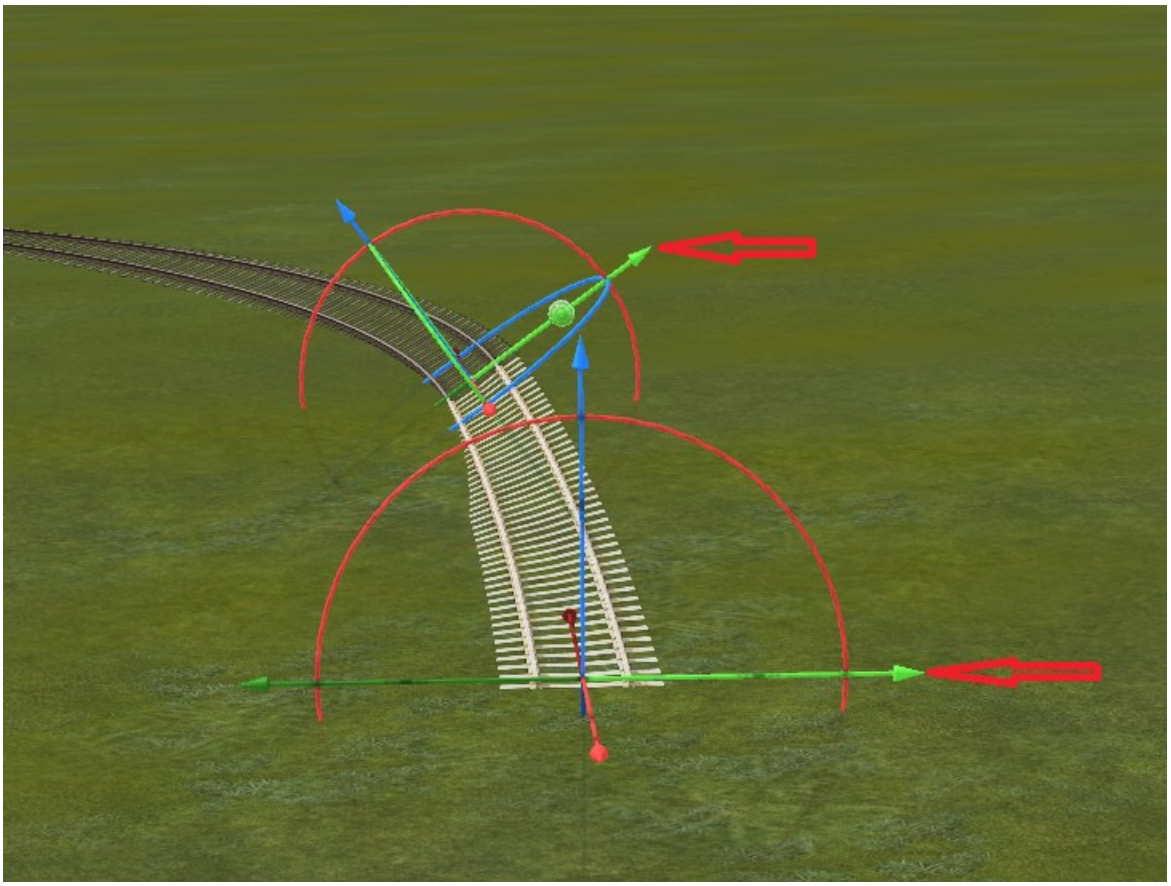
With each left mouse click, the created track is positioned on the layout while a new small section, ready to follow the mouse again, appears. This new upcoming track is automatically added in the direction of travel and can be added with a single mouse click.



This makes the creation of track sections faster and easier, because once you have selected the "start of an endless track" function, you can simply left-click to add more tracks.

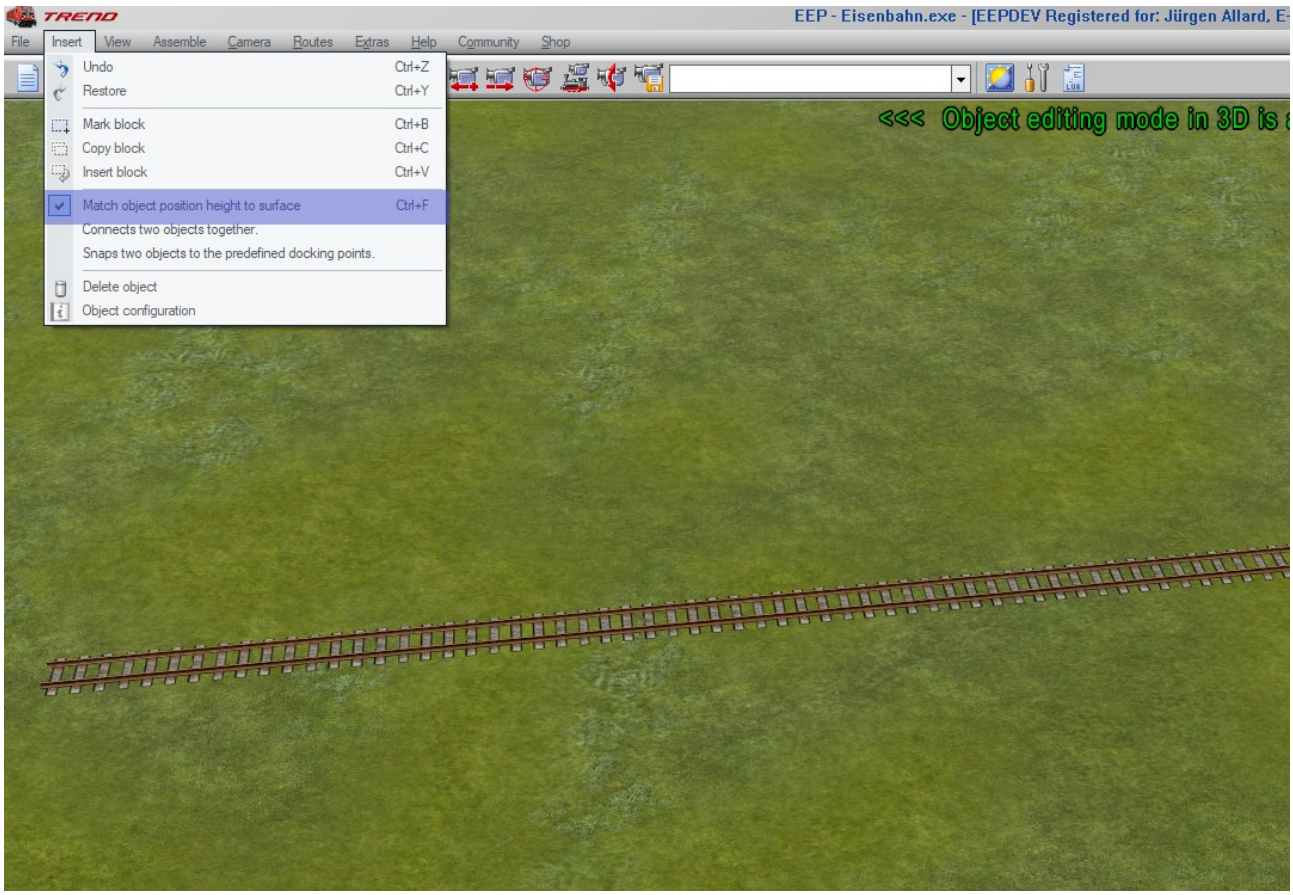
This function is also applicable to tunnels, moving camera tracks, invisible tracks and all other traffic routes.

This function automatically adjusts the inclination.



If the selected track to copy is rotated at the end, then the extension track will be straightened - the function will automatically stop any new rotations.

Note: This function ignores the terrain adjustment option: "Height-position correspondence of the object on the surface".



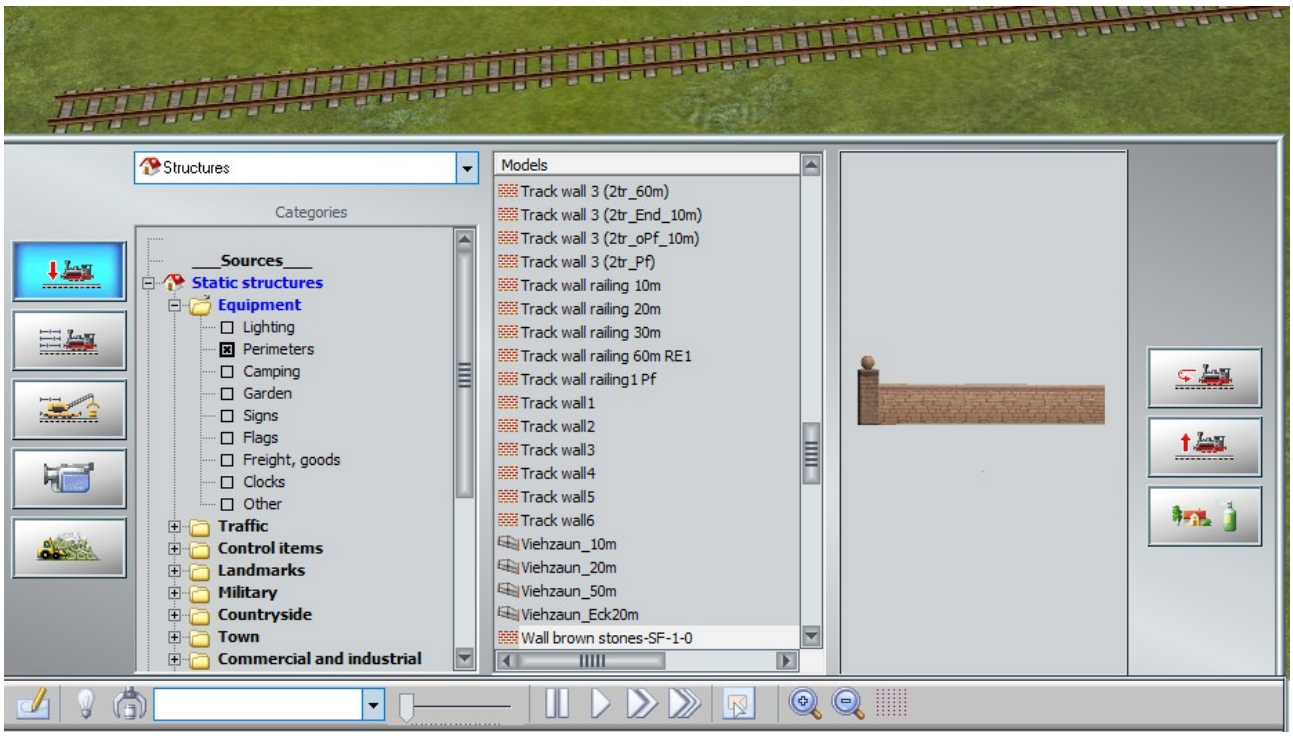
This function is very useful when shaping a river:

In order to stop the "start of an endless track" function, either click on the Esc key on your keyboard or right-click with the mouse on the active track.

Assembling models to other models

Important note
This function allows you to assemble models from **static structures and landscape elements** together. It works in both 2D and 3D editing mode.

If you want to work in 3D, activate the editing mode :

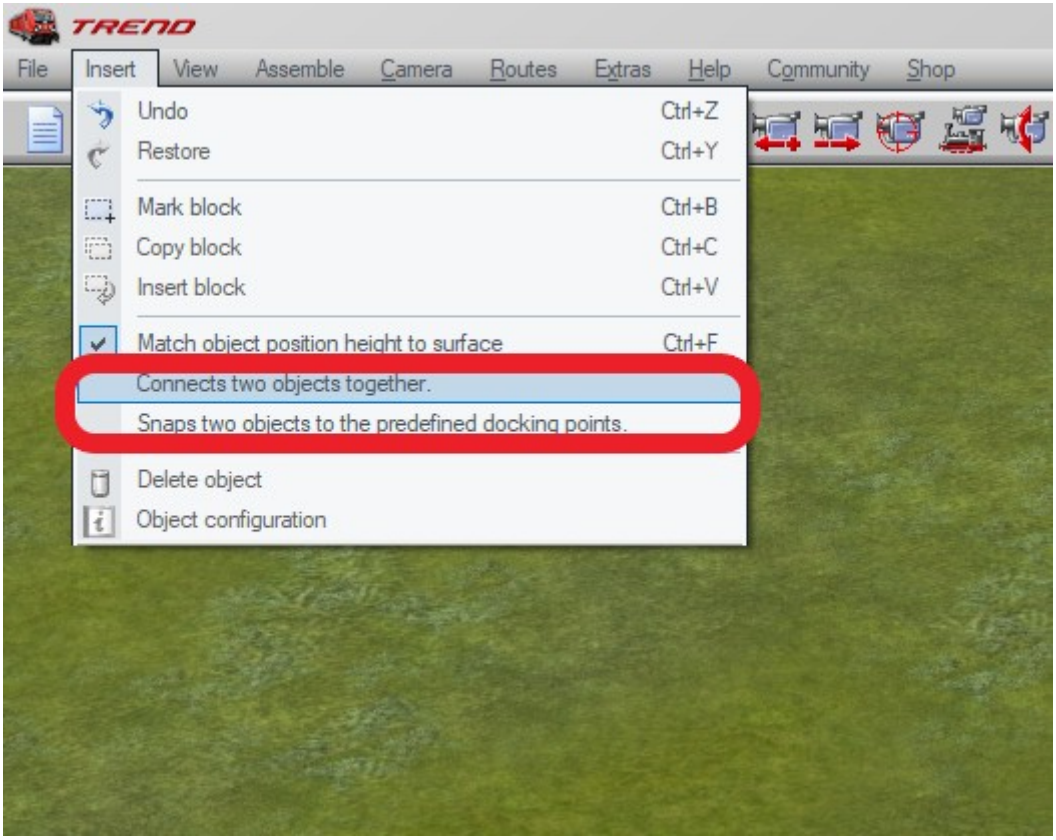


To activate the model association function, go to the **edit menu** and select either :

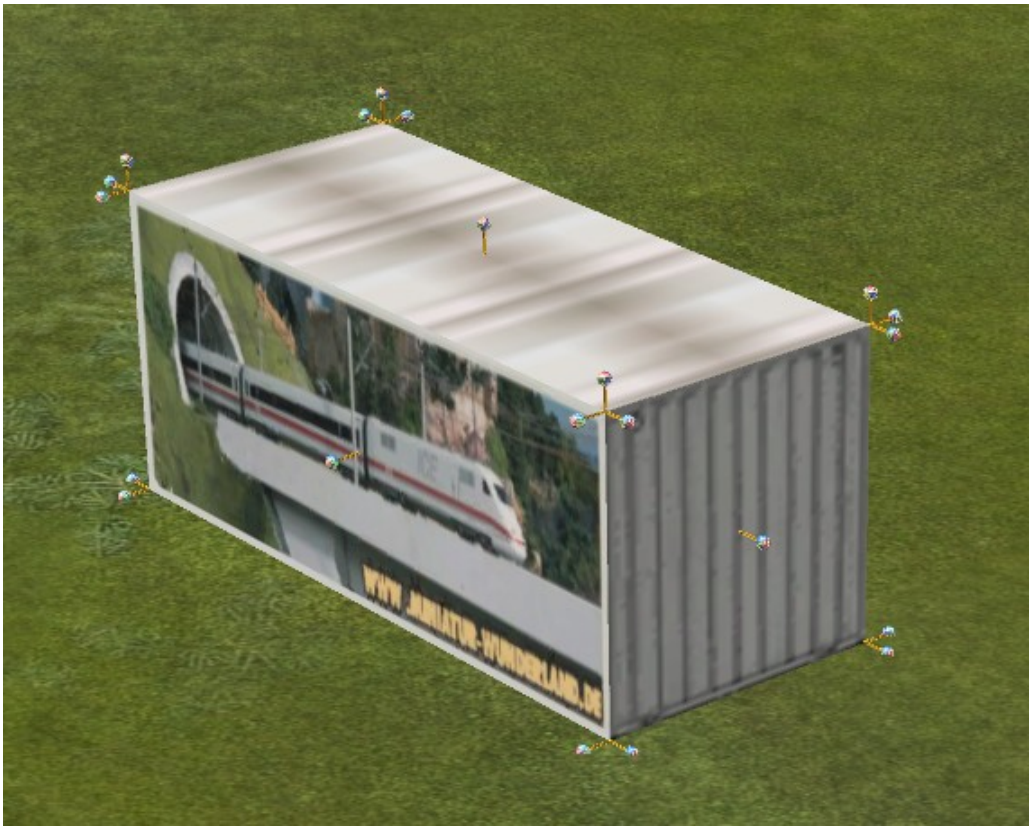
Connects two objects together

or

Snaps two objects to the predefined docking points.



When one of these options is activated in 3D editing mode, the corresponding docking points and vectors appear on the objects:



The docking point is located at the start of the vector :

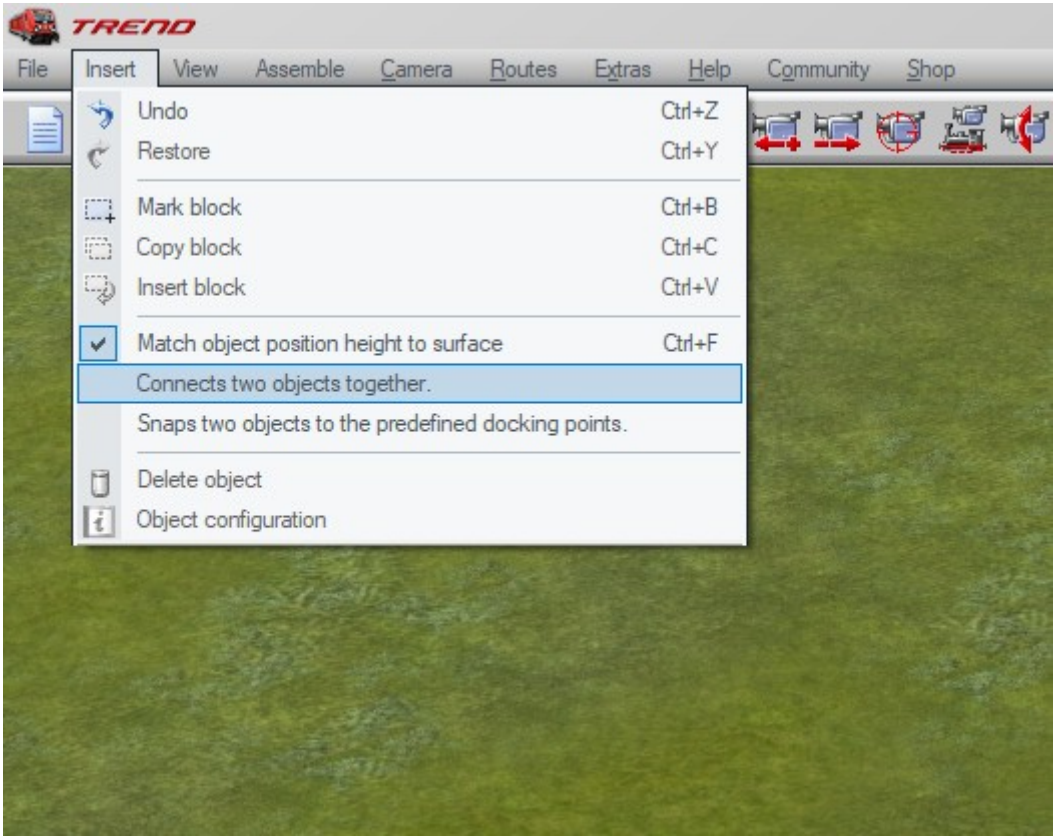
The objects are attracted to each other by their respective docking points, which allow them to be assembled.
The end of the vector is marked with a colored sphere that allows you to choose the appropriate vector according to the desired direction.

Now all you have to do is bring the object close to another object while holding down the left mouse button and then release the mouse button.

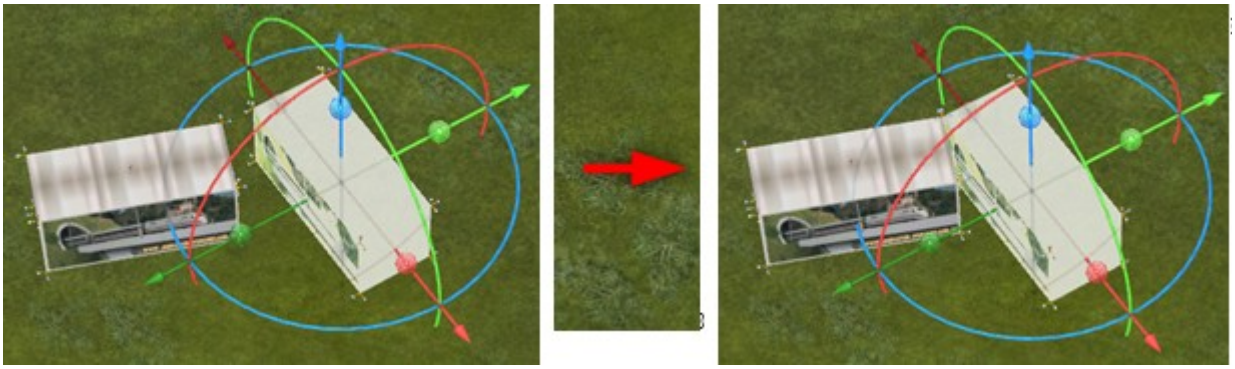
The object will then be attracted to the nearest docking point of this second object, if it is close enough to the second object.

The attraction perimeter depends on the size of the moving object. The larger the object, the greater the range of attraction. This attraction range can have **a minimum value of 0.5 metres and a maximum value of 10 metres** and is automatically calculated taking into consideration the size and scale of the object.

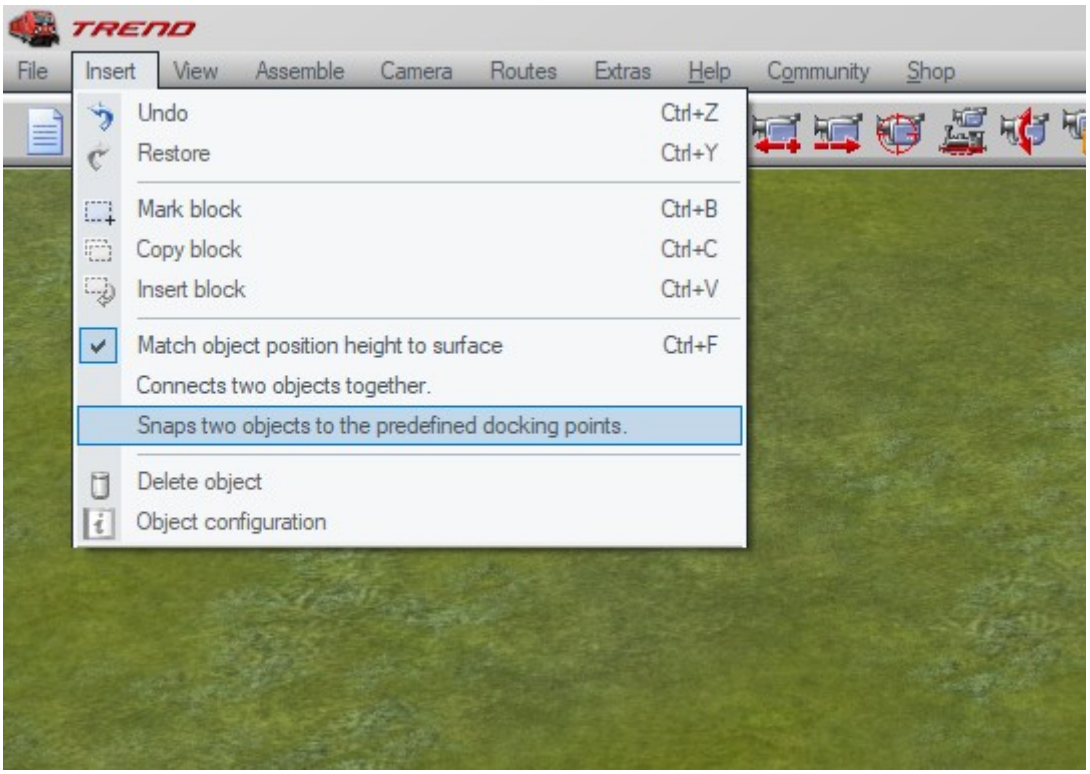
Option: **Connects two objects together.**



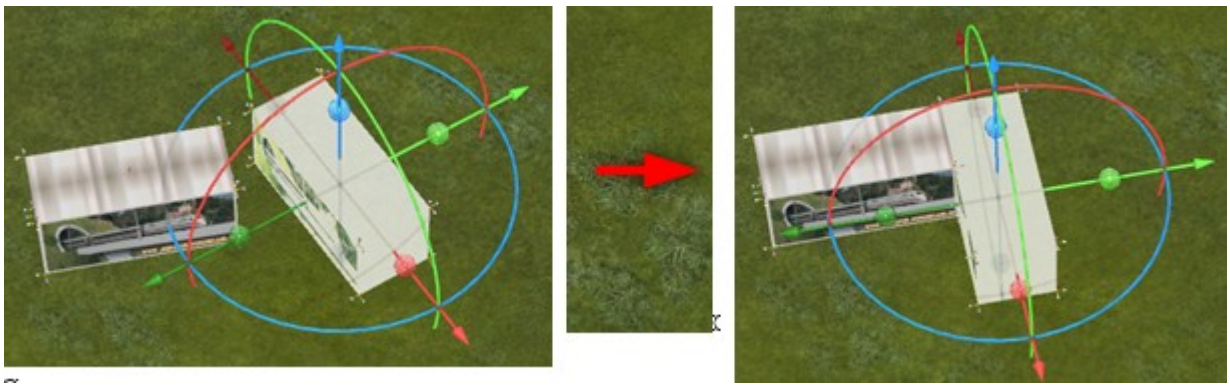
Assembles two models together **without changing the orientation of the attracted model.**



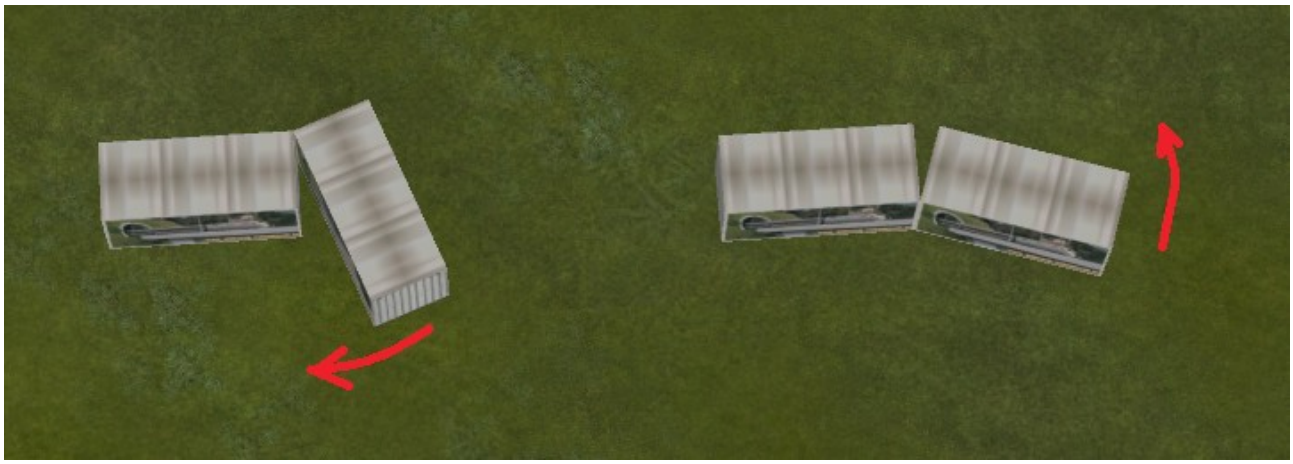
Option: **Snaps two objects to the predefined docking points.**



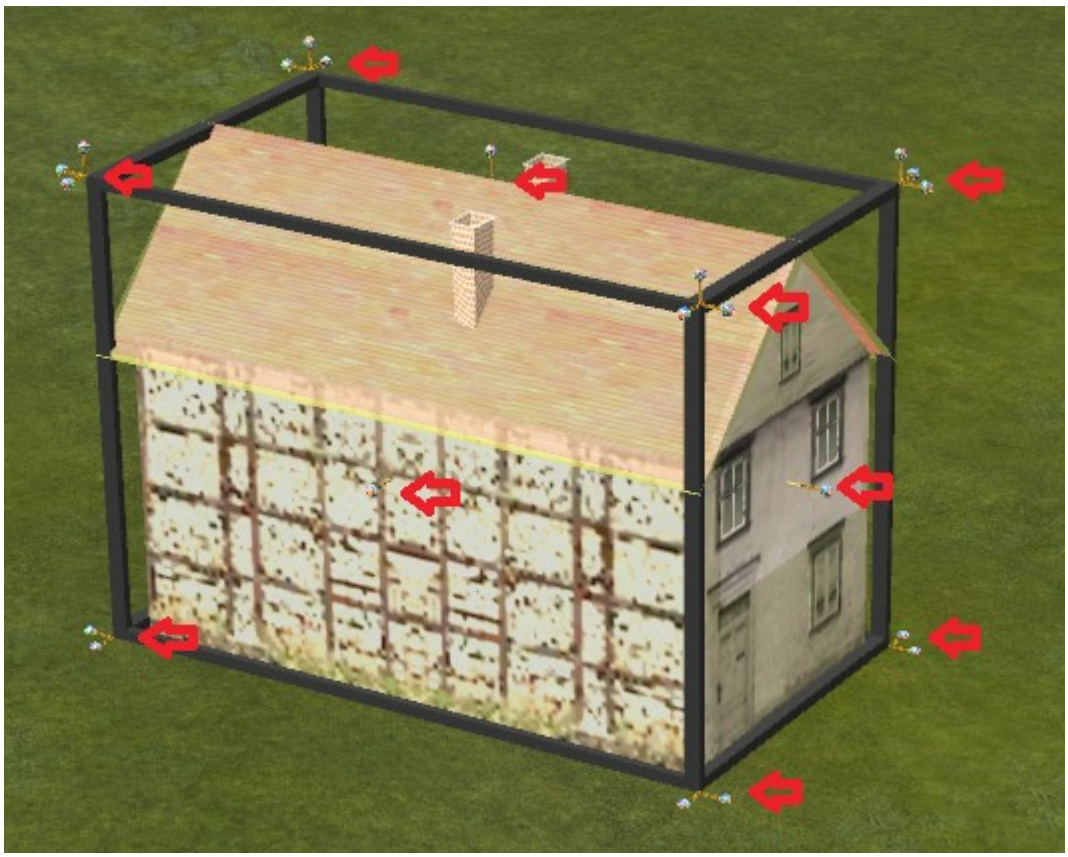
Assembles two models together and if needed **adjusts the orientation of the attracted model**.



The change of orientation is then always made at an angle of 90° to the nearest suitable face.

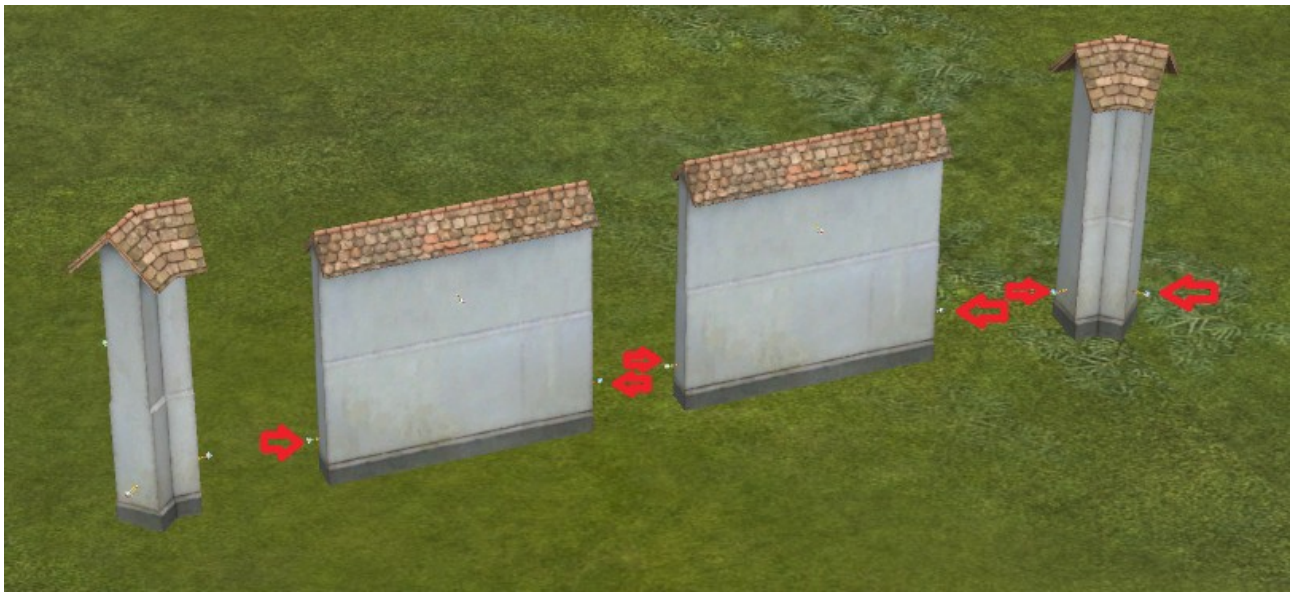


By default, objects for which no particular docking point has been defined have 14 docking points, i.e. at each corner of the cube in which the object is placed and in the middle of each face:



Some models of this plugin already have various specific docking points defined by the manufacturer for example :

Wall with top 3x3
Wall with top 3x5
Pillar with top 30
Pillar with top 45
Pillar with top 60
Pillar with top 90
Pillar with top 180
Column with top
Wall with top 3x2 and door
Wall light
Wall-mounted flowerpot with hanging plant



Some catenary masts have additional docking points which are defined by the plugin 2 :

DB K 2m5 0
DB K 2m5 -40
DB K 2m5 +40
DB K 2x2m25 0
DB K 2x2m25 -40
DB K 2x2m25 +40
DB K 2x2m25 +-40
DB K 2x6m75 0
DB K 2x6m75 -40

DB K 2x6m75 +40
DB K 2x6m75 +-40
DB K 4m0 0
DB K 4m0 -40
DB K 4m0 +40
DB K 6m75 0
DB K 6m75 -40
DB K 6m75 +40
DB K Pair 2m5 -40 +40
DB K Pair 2m5 +40 -40
DB K Pair 4m0 -40 +40
DB K Pair 4m0 +40 -40
DB K 2s 4m0
DB K L 2s 4m0

You can then add lights to these masts.

Its use in 2D mode is performed in the same way.

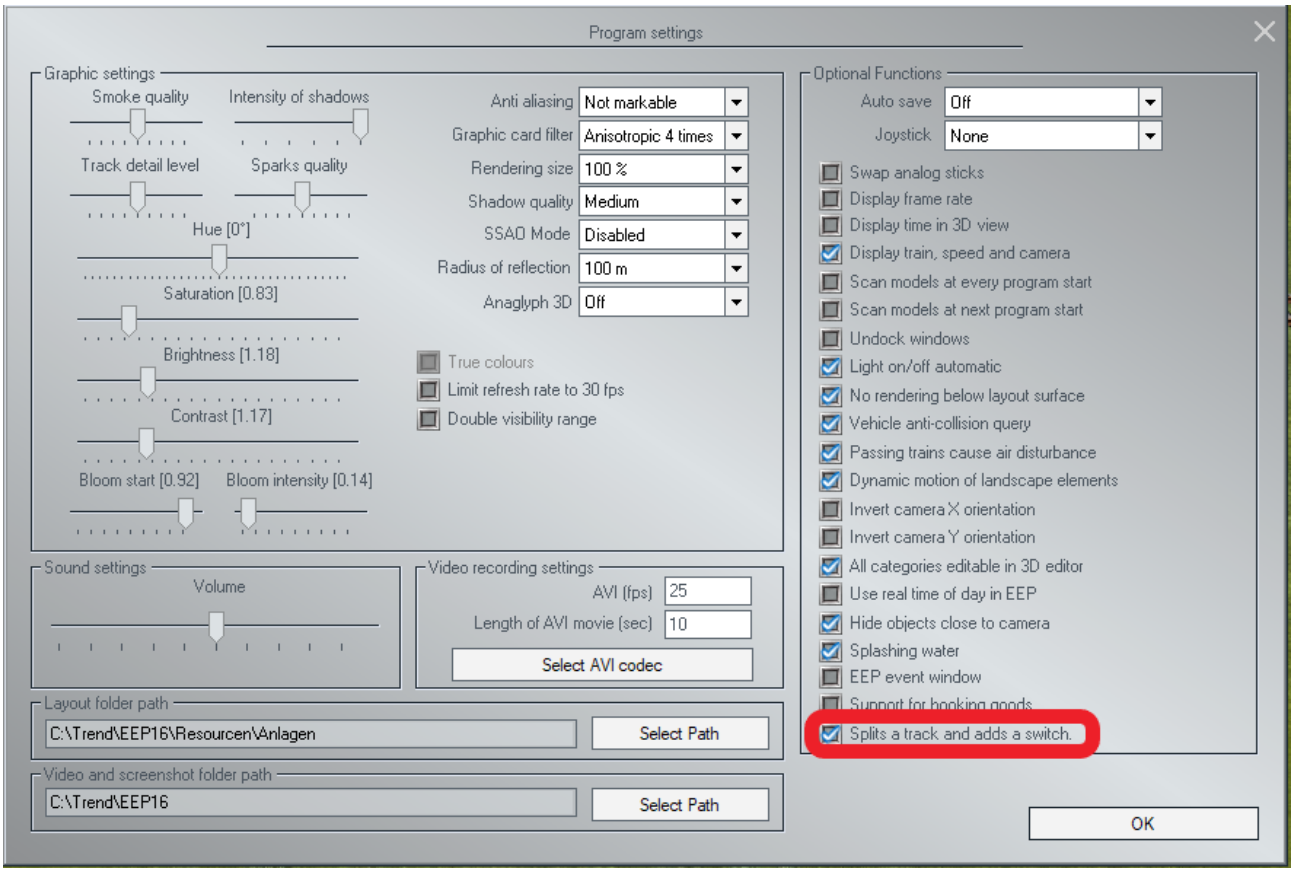
The automatic switch construction.

Important note
This new feature is available in both 2D and 3D editing mode.

Inserting a switch was previously time-consuming and sometimes difficult, especially when adding a new track or road (or any other spline) to an existing track or road. This process can now be automated.

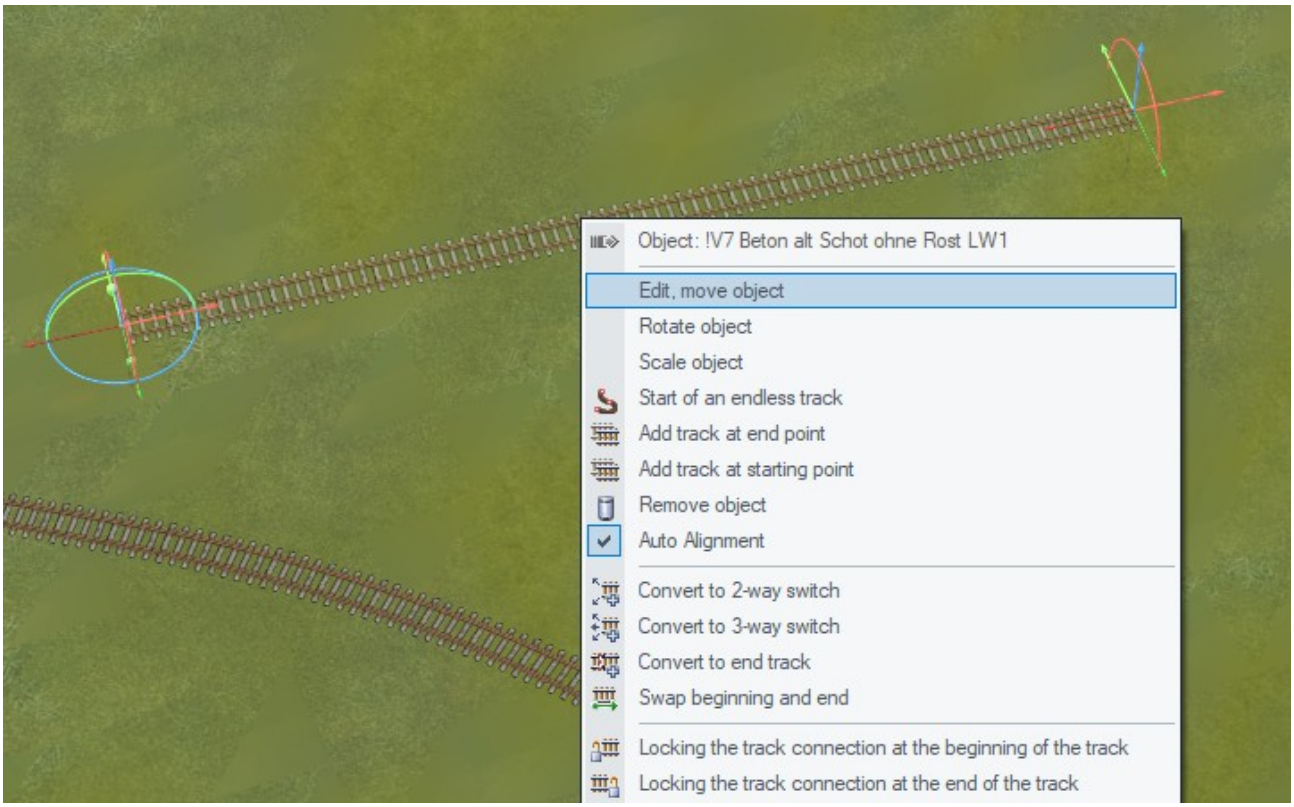
In the **Program Settings** menu, activate the option

- Transformation of tracks with branch lines and switch mechanisms.

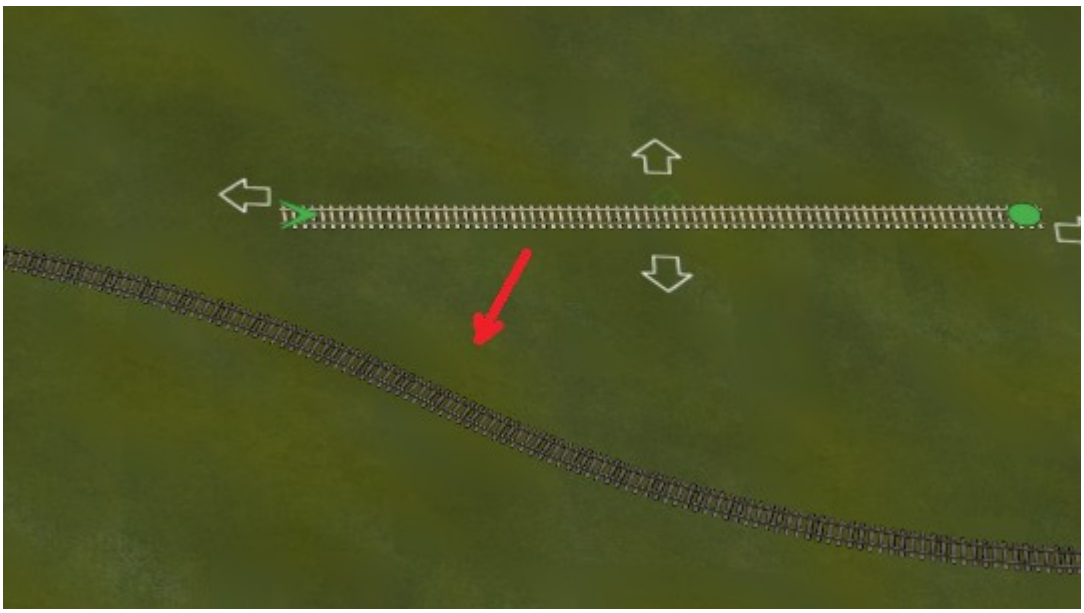


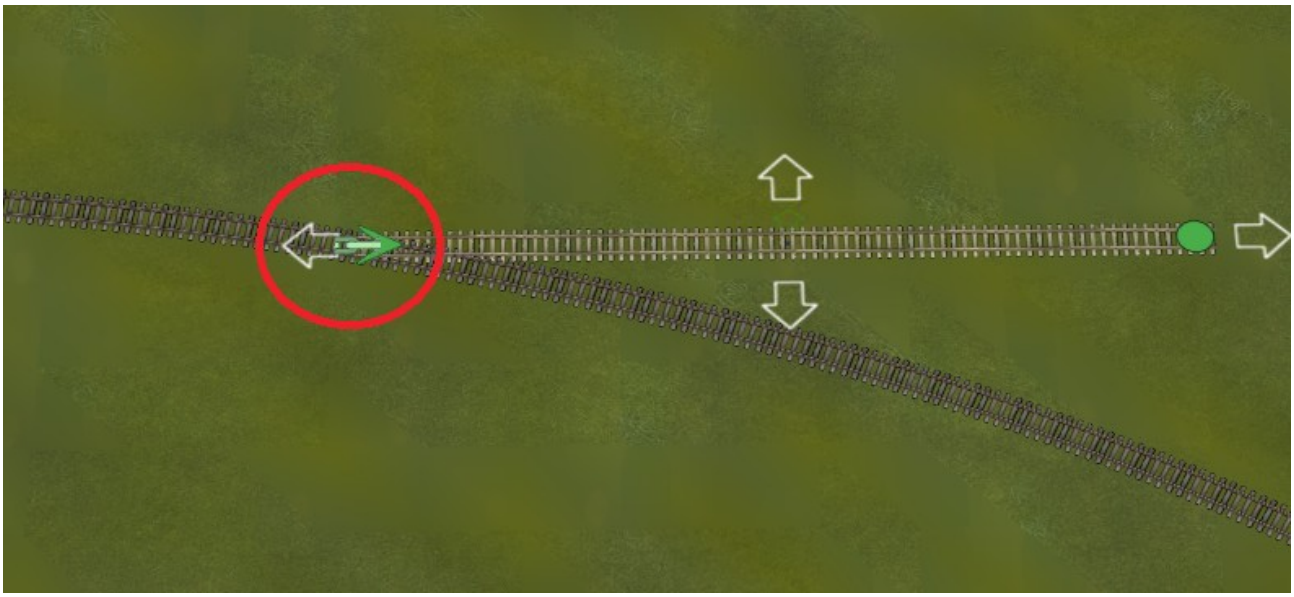
How to use in 3D mode

You can move the rail by selecting the track and after having opened the contextual menu with a right click of the mouse, and by activating the option **edit, move object.**



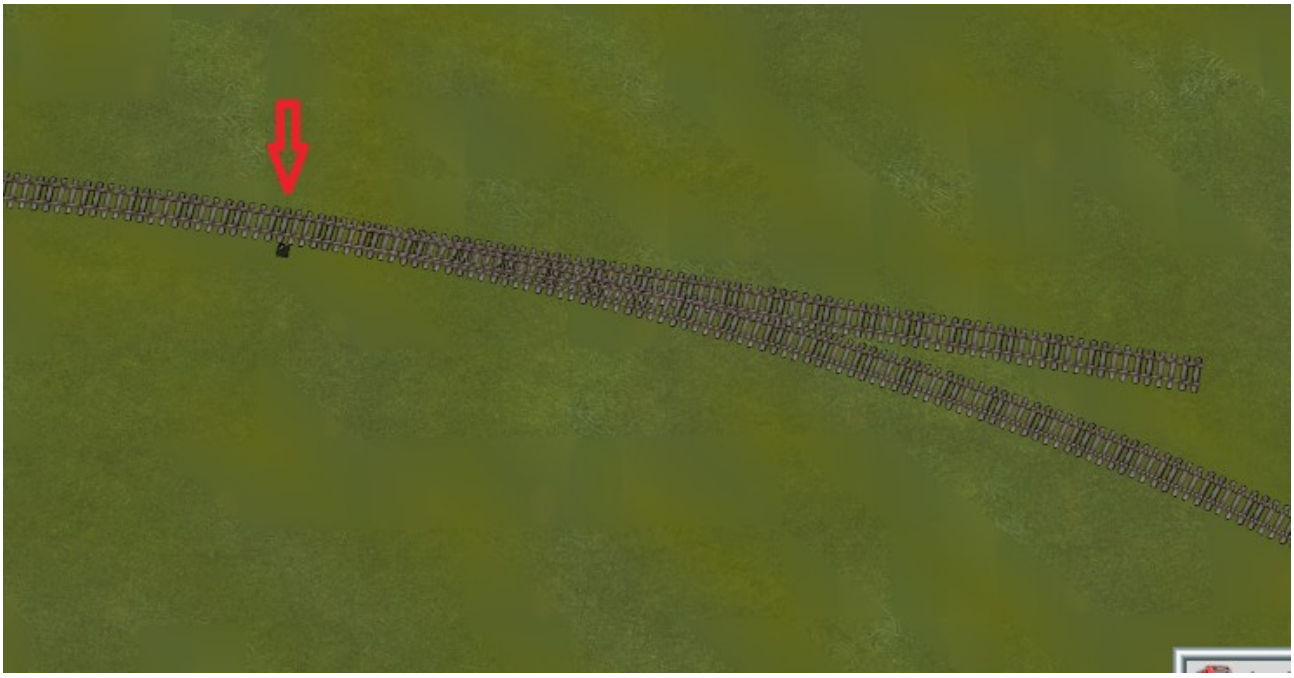
Hold down the left click and move the rail until the end or beginning of the track is positioned at the location where you intend to build the switch.





You will see a green chain link appear at the assembly point.

You can still adjust the location of the switch by moving the new track along the existing track and then release the left mouse click.

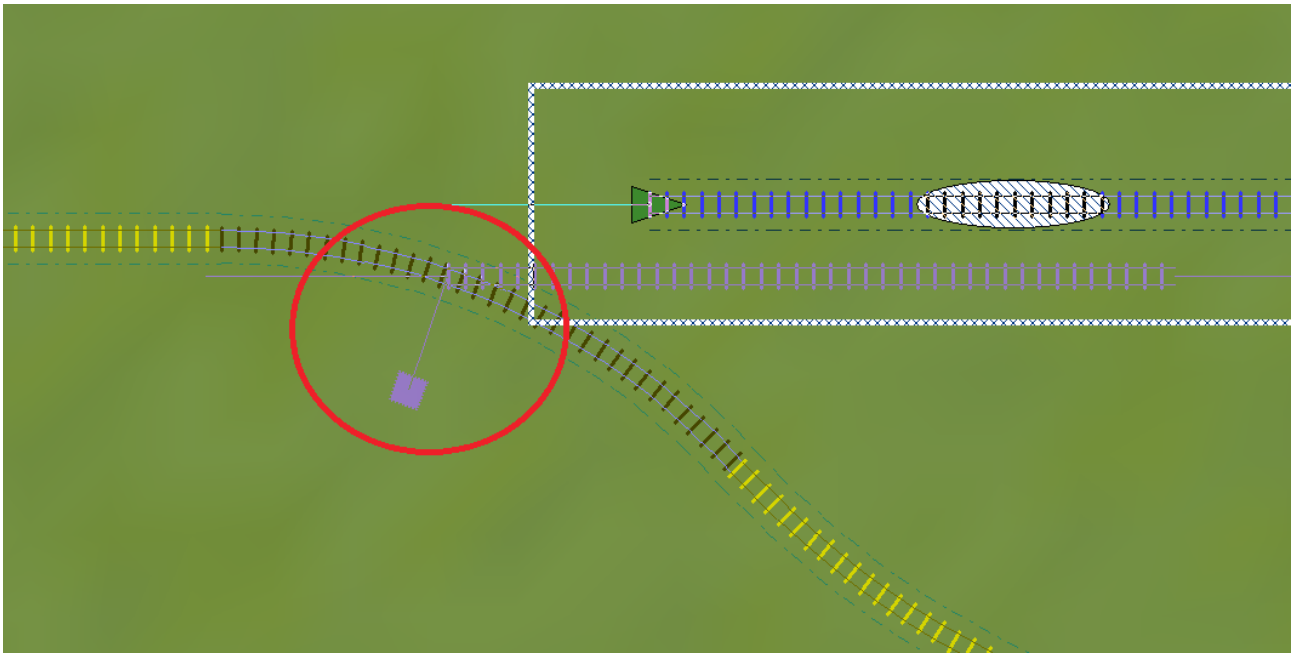


The switch will be automatically built and the rail will move away from the existing track to form a branch of the new switch. This new section can, of course, be extended by building a new rail or road track connection.

Important: this function is only available when moving a track and not when editing a track (e.g. when giving it a bend). It must be possible to edit the track on which the switch is intended to be placed.

Note: The track on which the switch has been built will be divided into 2 parts : The first part is a switch on which two tracks are now connected: the second part of the divided track becomes one of the two branches of the switch.

In 2D mode as in 3D mode, the switches are built in a similar way.
While in 2D mode, the creation of a switch is symbolized by a green triangle (by a black square if no connection is established), in 3D mode it is a green link which materializes this creation of a switch. The blue color only indicates the connection of a rail and not a possible creation of a switch.

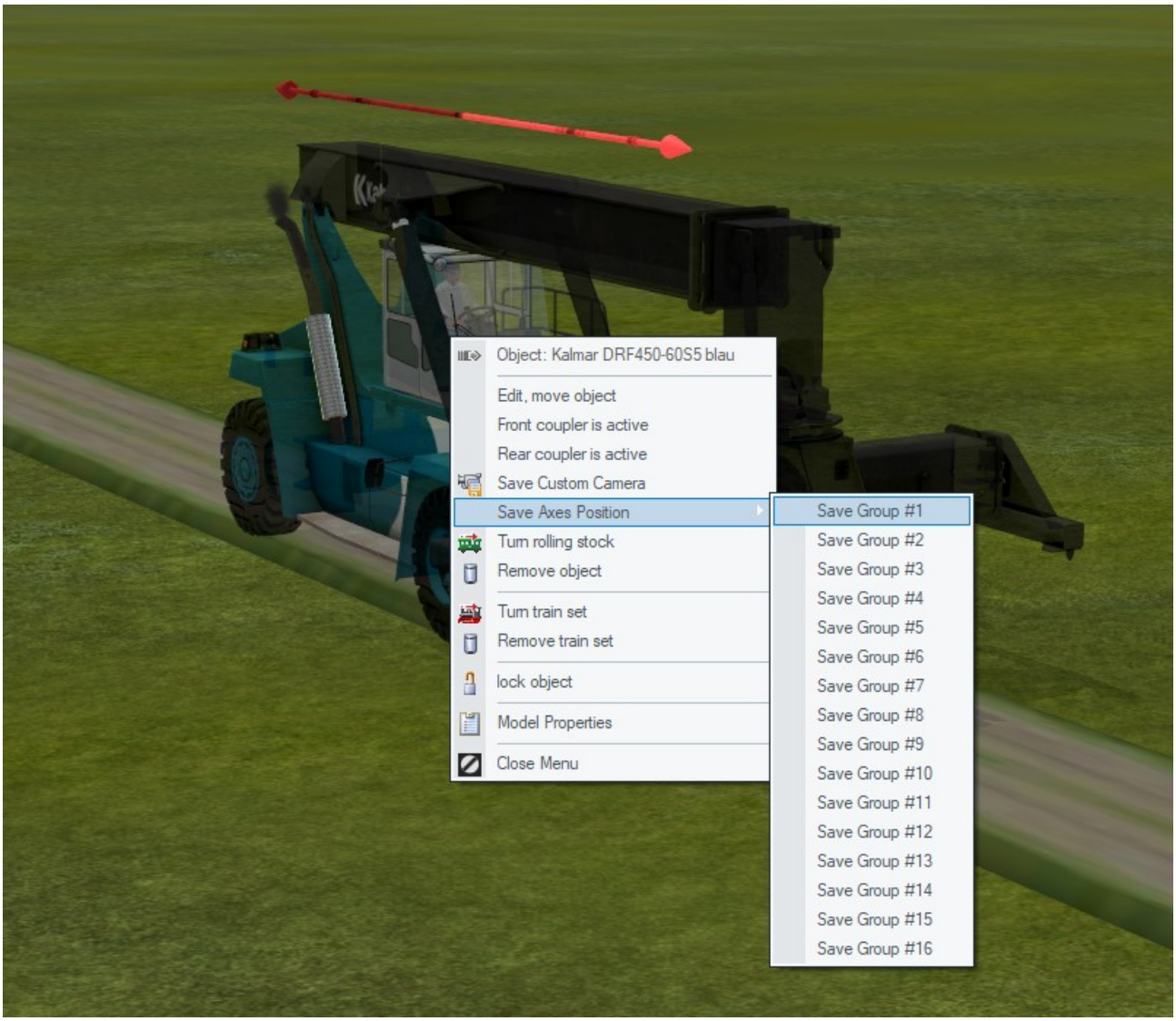


The switch is built as soon as the left mouse click is released after the rail has been adjusted.

Control of the moving parts of the vehicles.

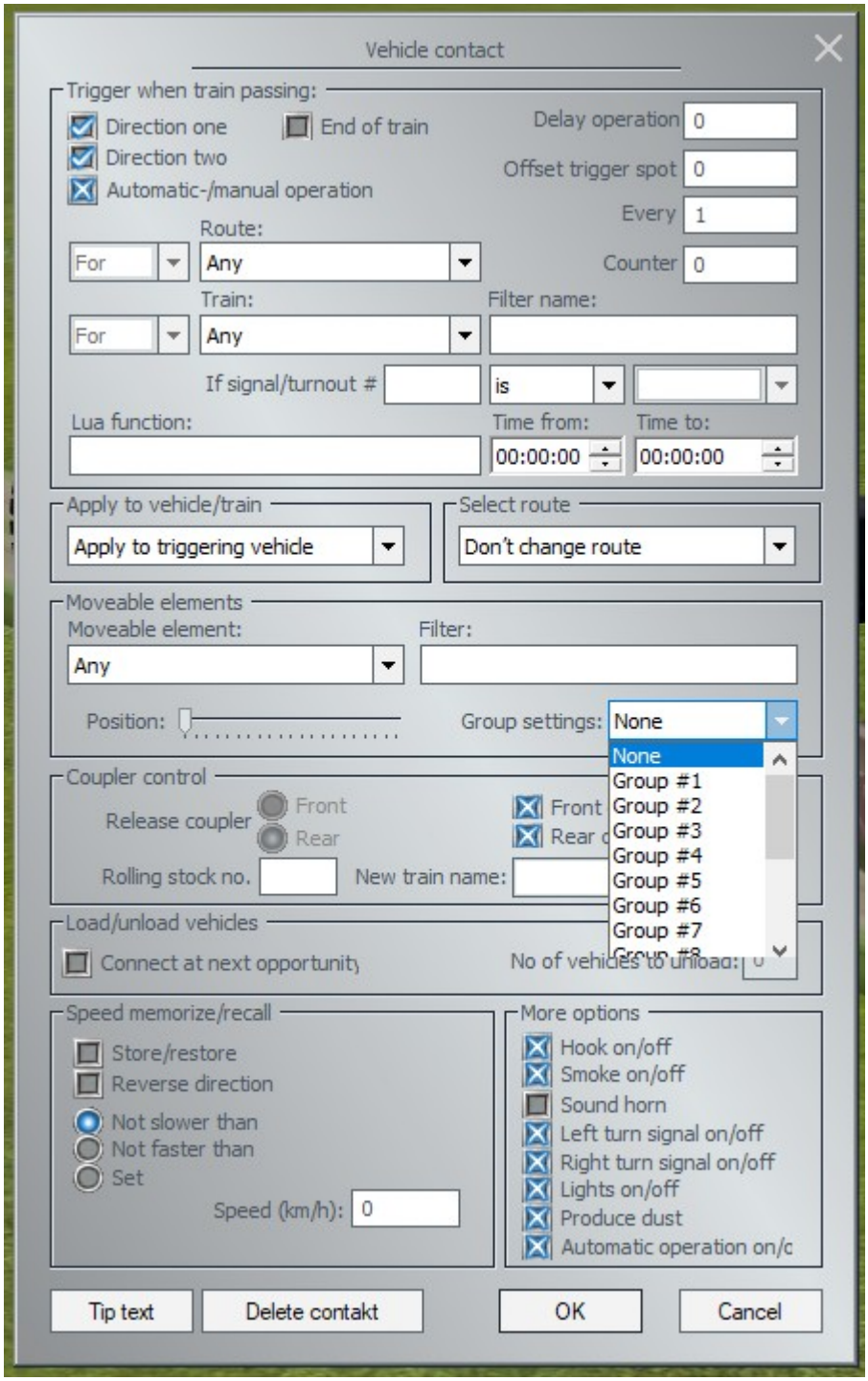
Advanced users of EEP appreciate and often use the ability to adjust the moving parts of rolling stock on rails, roads, etc.
Various moving parts of the vehicle are connected to an axis.
This makes it possible to animate the vehicle by moving its moving parts: crane arms, grapples, ropes, buckets, cabs, drivers, pantographs, etc. These are essential elements in the construction of more advanced models.

The multitude of possible adjustments can quickly make it very tedious to adjust the various moving parts using several contact points.
To facilitate these actions in EEP, you can now use the function to save the position of all the moving parts of a model and make use of this saving at any time.



Each group will remember the specific settings given to all the moving parts of a model.

This is a very useful tool that will allow you to define all the moving elements as they have been saved, using one single point of contact or a new function (Lua).



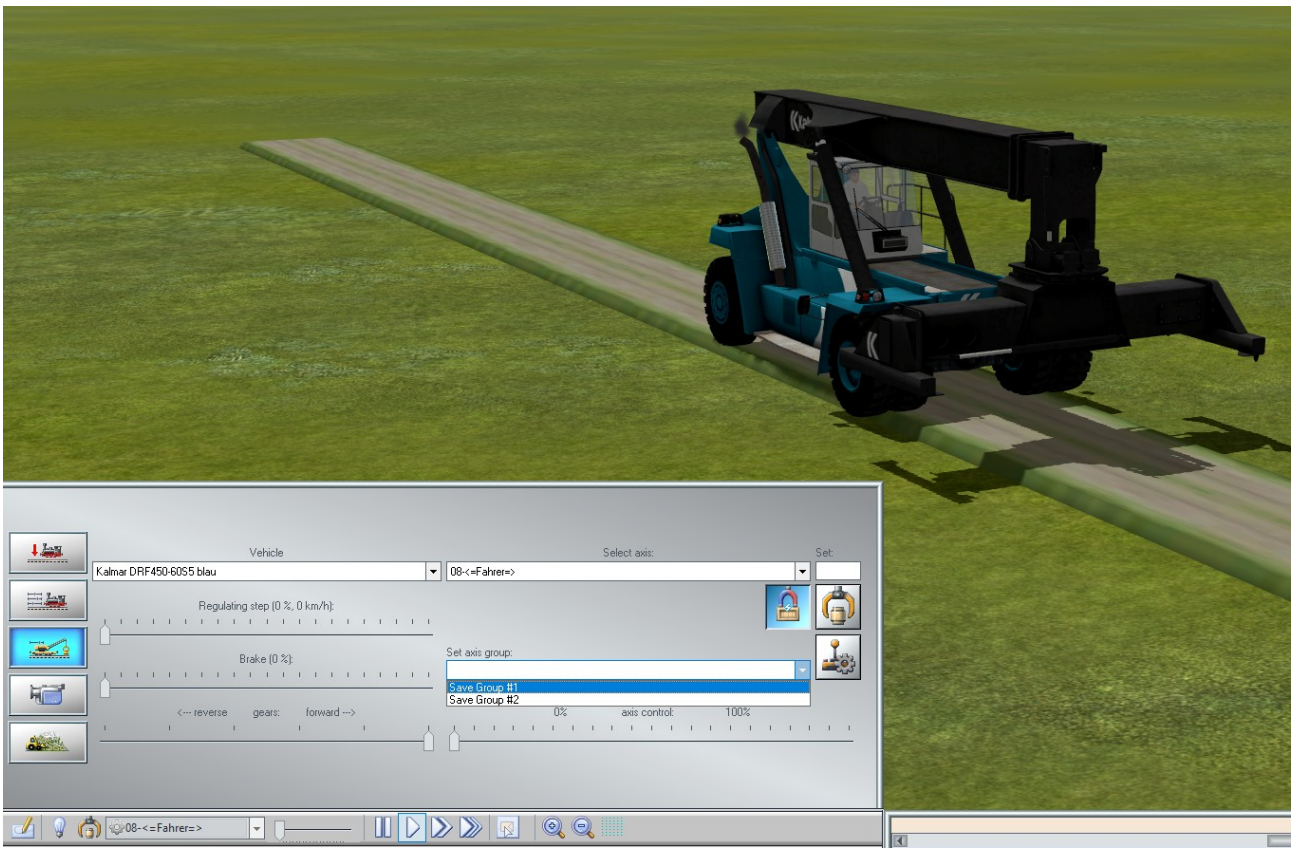
Until now, it was difficult to precisely adjust a group of moving parts. Most of the time, it was necessary to place a temporary contact point so that the adjustments could be tested, the axes reset if necessary and then finally save these new adjustments once they were found.

This problem has been solved with the possibility to **save the positioning of the axes from the moving parts as a group.**

EEP now gives you the possibility to choose among the different groups of saved axis settings.

If these settings need to be changed, simply change the axis parameters in Edit mode and save them again in the same or a different axis group.

This gives you additional possibilities for operating complex machines that can perform actions stored in an axis group once they reach the desired location.



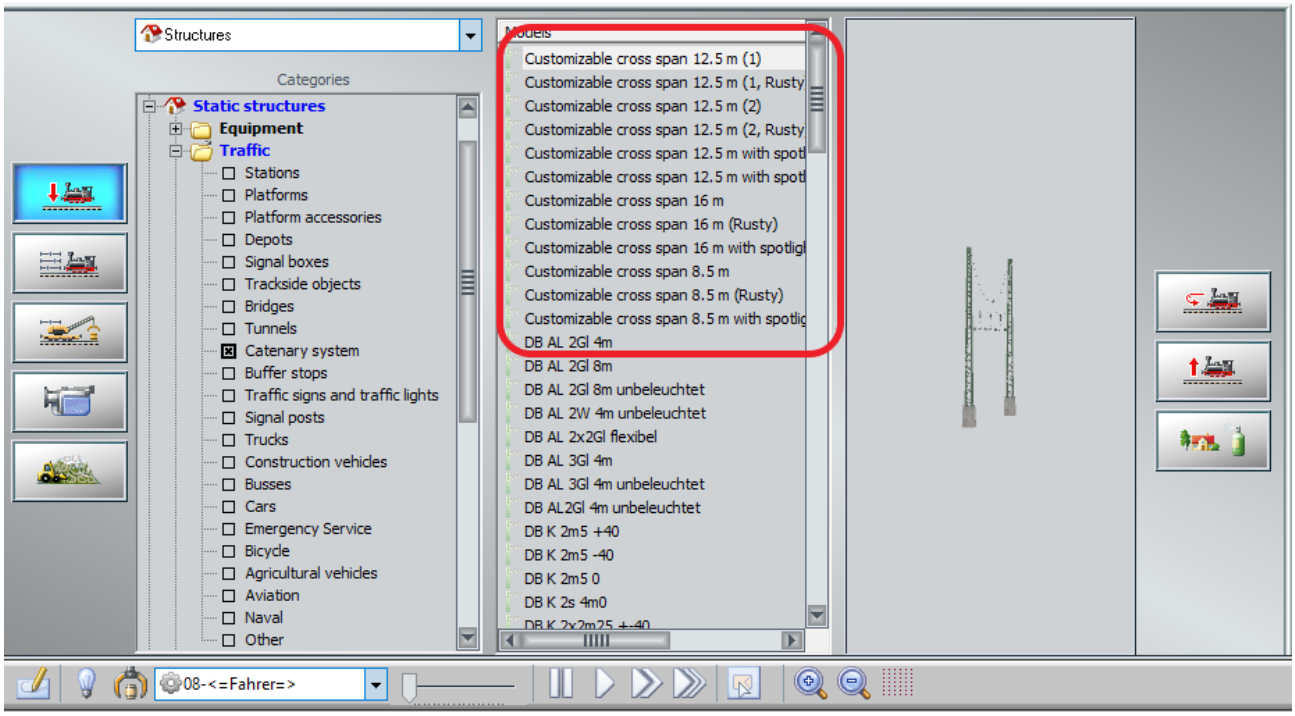
Some new models may already have axis group parameters predefined by the designer.

Note: To delete a stored axis group, hold down the Ctrl key in the model editing mode.

Configurable double masts of catenaries.

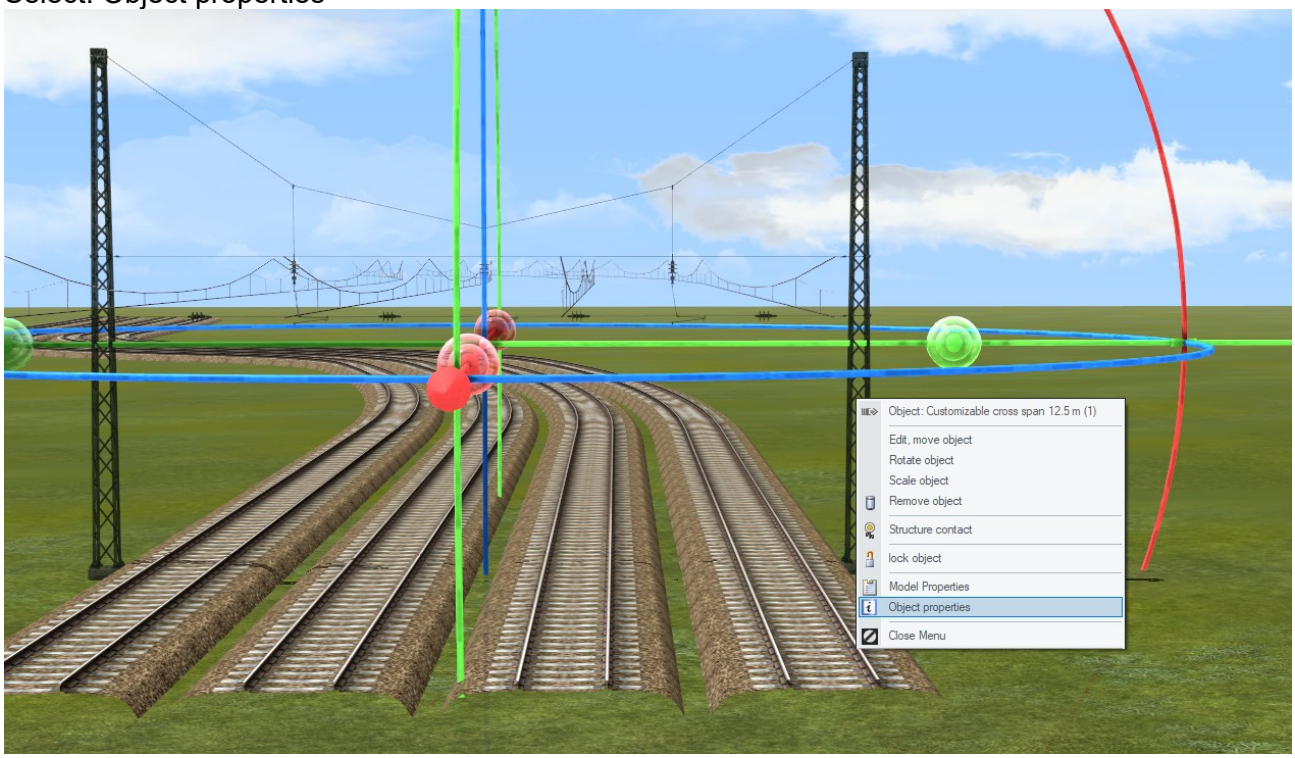
This plugin 2 allows you to freely configure certain models of double masts for electric traction. From now on, the user can define the number of electrical accesses in the properties window of the model dedicated to electrified tracks and, what is important, the distance between them (distances between tracks). It is also possible to configure the so-called zigzag and enter an appropriate offset value for the power line. In this window we also have the possibility to specify whether the suspension cable should have an electrical isolator or not, i.e. to define whether the tractions are supplied with different voltages or not.

These models can be found in the Real Estate group under the following name :
Customizable cross suspension



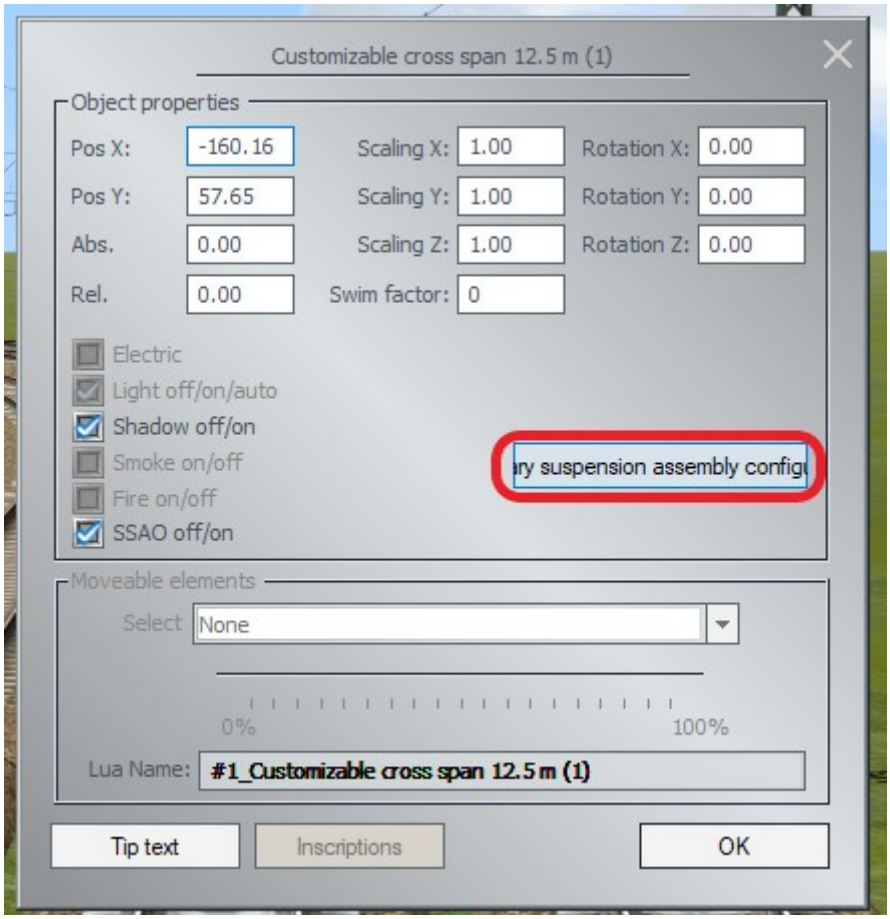
Configuration of these double masts :
After placing the double mast at the desired location on your installation, you must first open the model properties window. To do this, select the model with the left mouse button and then right-click to bring up the context menu.

Select: Object properties



The model properties window appears with a new button :

Catenary suspension assembly configuration



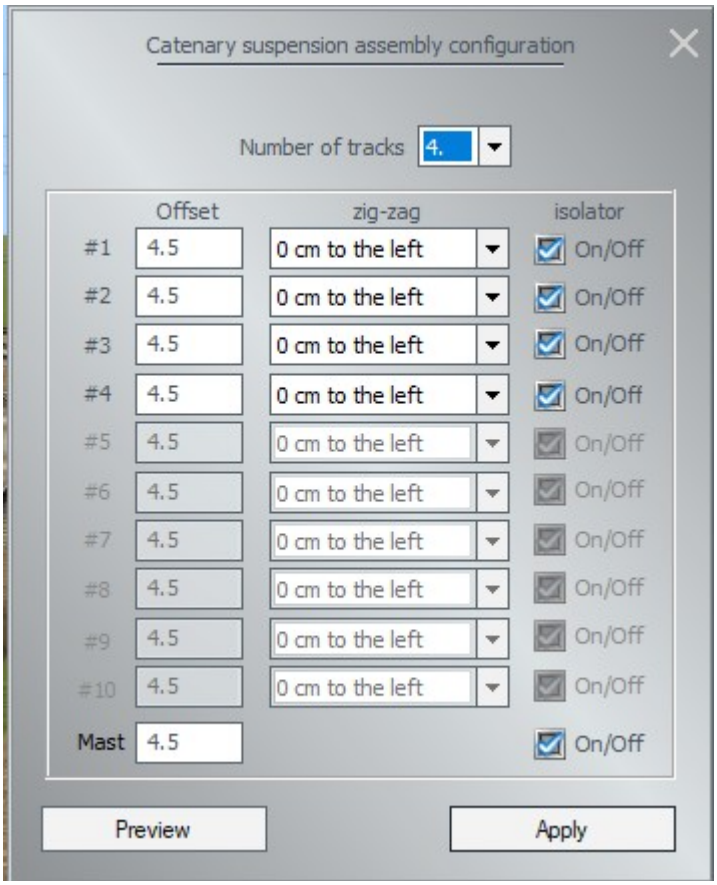
These models can then be configured from the properties window to adapt them to the layout of our tracks.

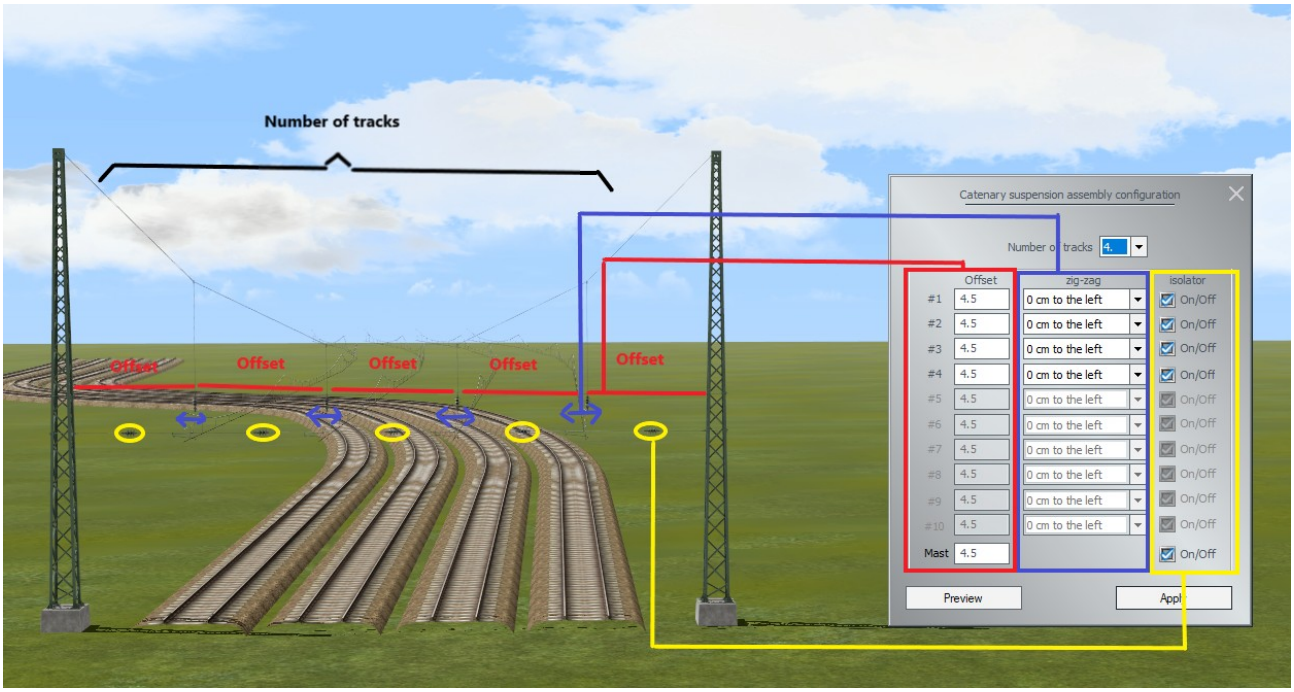
Number of tracks: the number of tracks covered by the overhead line

Offset: Gap between two successive catenaries

Zig-zag: diagonal offset of the individual catenaries

Isolator: inside each segment, it is possible to insert or not a horizontal isolator (In reality, this prevents the interference of the different tracks between them (voltage separation) during the passage of the different traction units).

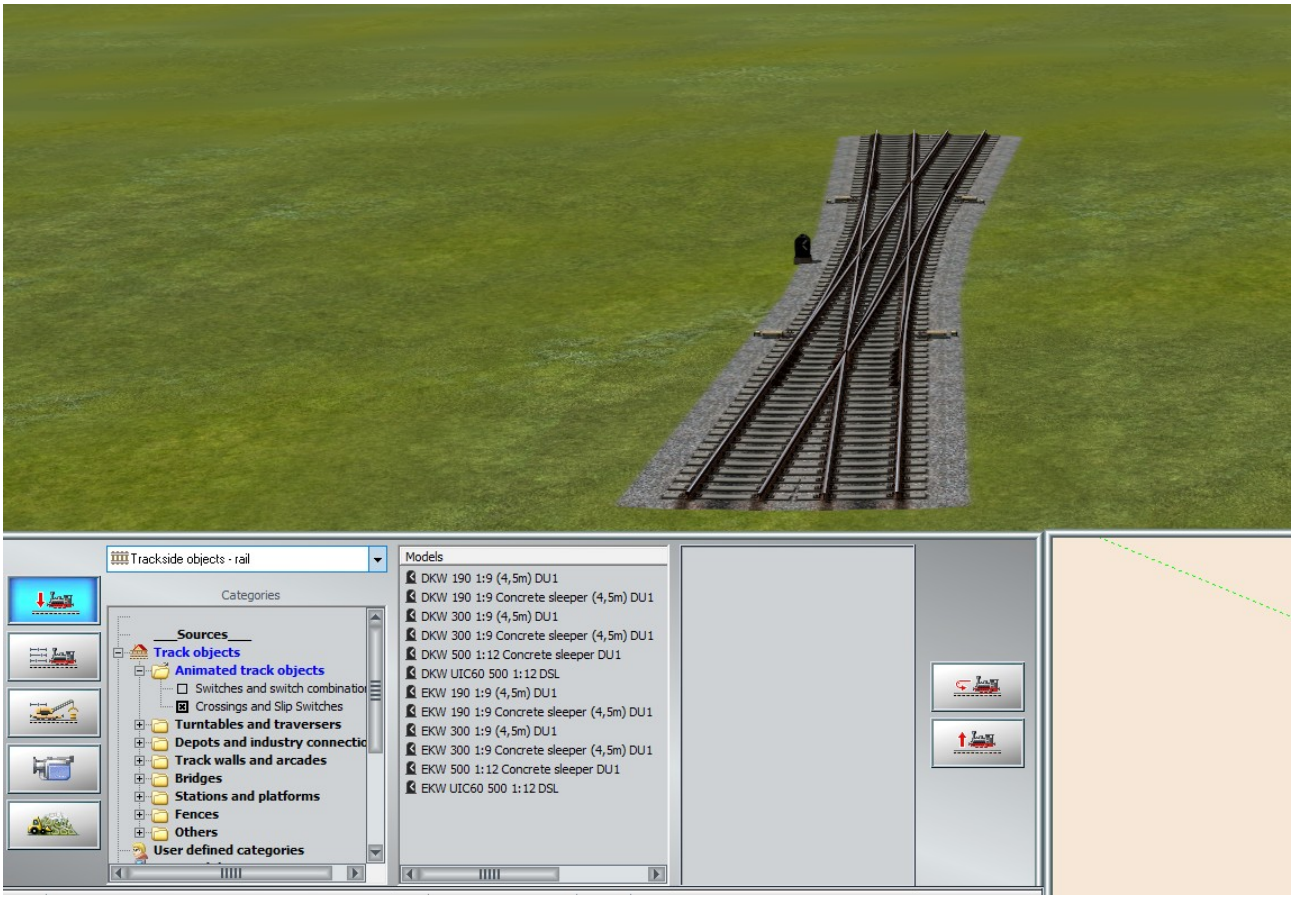




You will find other mast models in our online shop.

Animated single and double junction crossings

EEP16 Plug-in 2 supports double-junction switch models with high-quality railway animations on a realistic gravel bed.
The corresponding models (see below), e.g. DKW 190 1:9 (4.5m) DU1, can be found in the EEP shop.



Closing remarks

With the development of Plug-in 2 for EEP 16.2 many wishes of experienced EEP users have been taken into account. The new features facilitate both the design and the management of your system.

We hope you enjoy this second plug-in for EEP 16.2.

Your Trend EEP team.