Manual to Plug-in 3 for EEP 17.3

Dear customers, first of all we would like to heart-fully thank you for purchasing EEP 17.3 Plug-in 3.

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.

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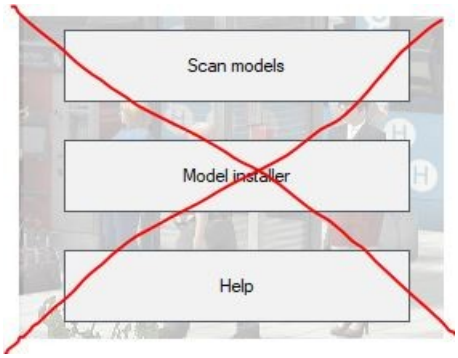
Installation instructions

Please make sure that update #3 of EEP 17 is installed. This is the prerequisite for this plug-in. You can check this in the lower left part of the loading.



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 EEP 17.3.

If necessary, please leave your EEP 17.3!

Please start installing the Plug-in by double clicking on the file **V17TSP10061.**

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 17.3

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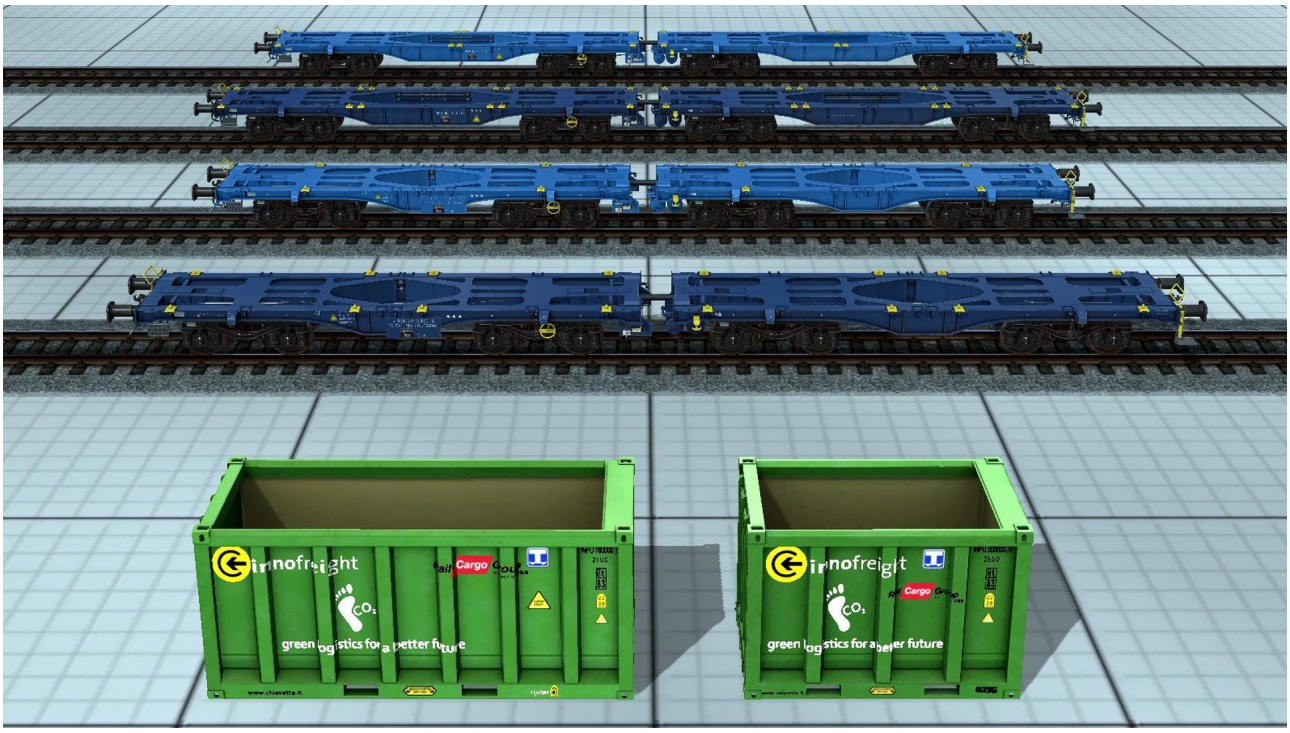
If the installation was successful, then you will see in the lower left part of the launch window the EEP 17.3 version followed by the mention „Plugins: 3“. (Here 1,2 and 3 since I have Plug-in 1, Plug-in 2 and Plug-in 3 installed)

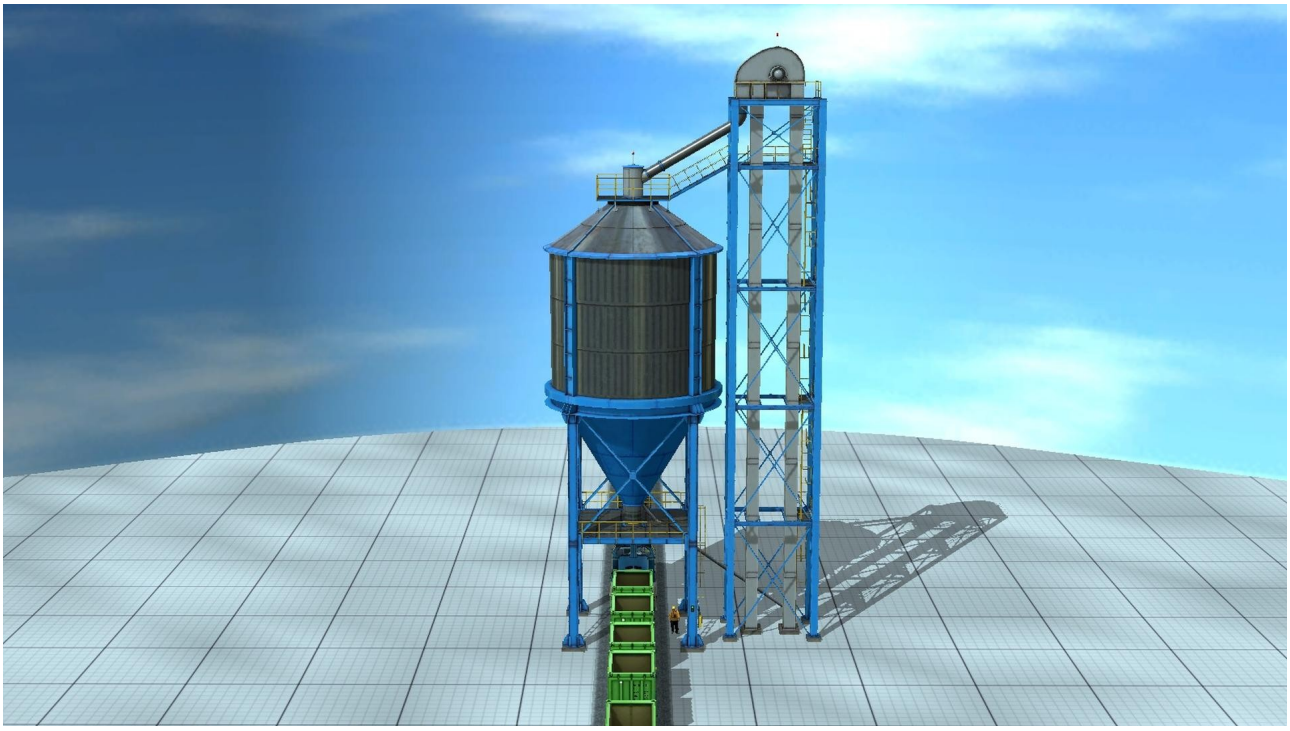
New models contained in Plug-in 3 for EEP 17.3 :

- 8 half-wagons for goods (model A and model B) for transporting Innofreight containers.
- 2 container dimensions: 13 feet and 20 feet in width.

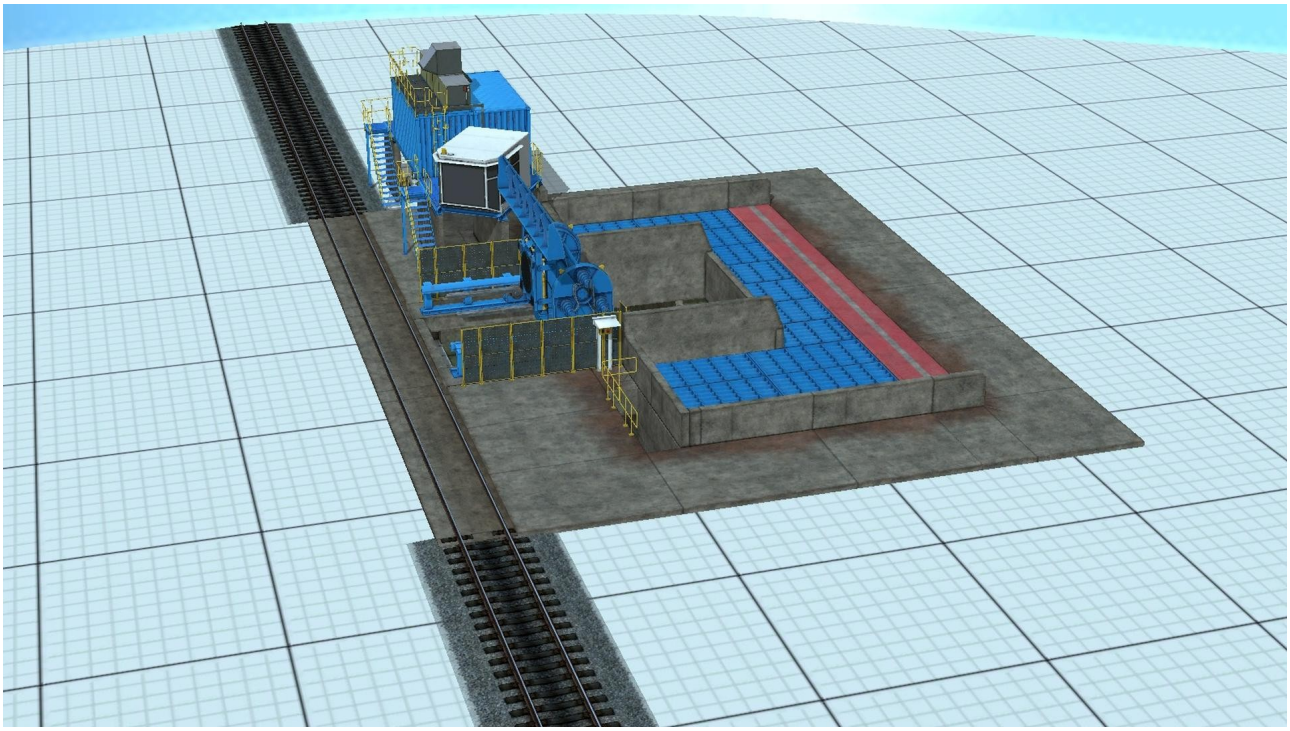


The arrangement of the containers for transport by freight wagons is flexible, although predefined locations are provided. These containers are, as in reality, fixed to anchoring points present on the transport wagons.

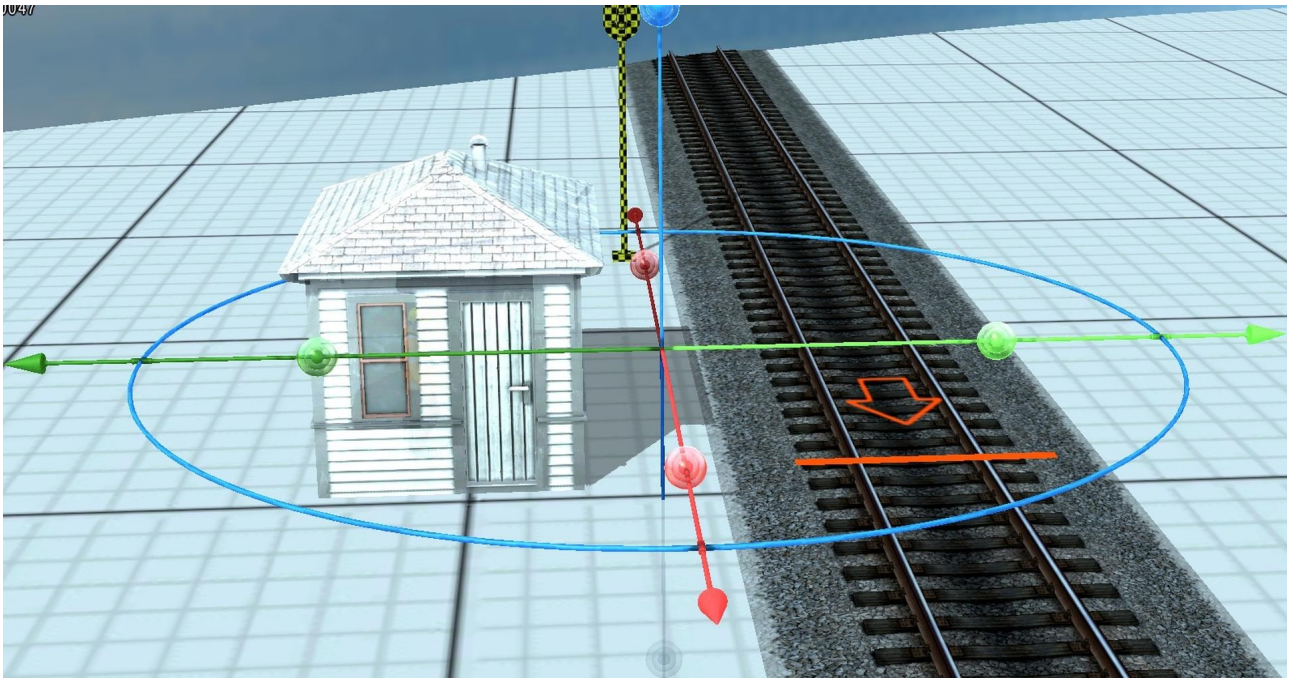
- Loading module categorized as a signal.



- Unloading module categorized as a signal.



- Small structure serving as a rest area for an animated signaler categorized as a signal.



- 1 BR 365 diesel locomotive with numerous features.

- As well as a demonstration layout:
  - showcasing the different models of plug-in 3
  - with a guided tour by camera lasting over 50 minutes.
  - automation through Lua script (verbose version with sections for easier navigation)
  - tips on using the new models, but also advice for an optimized layout construction.

Specifications:

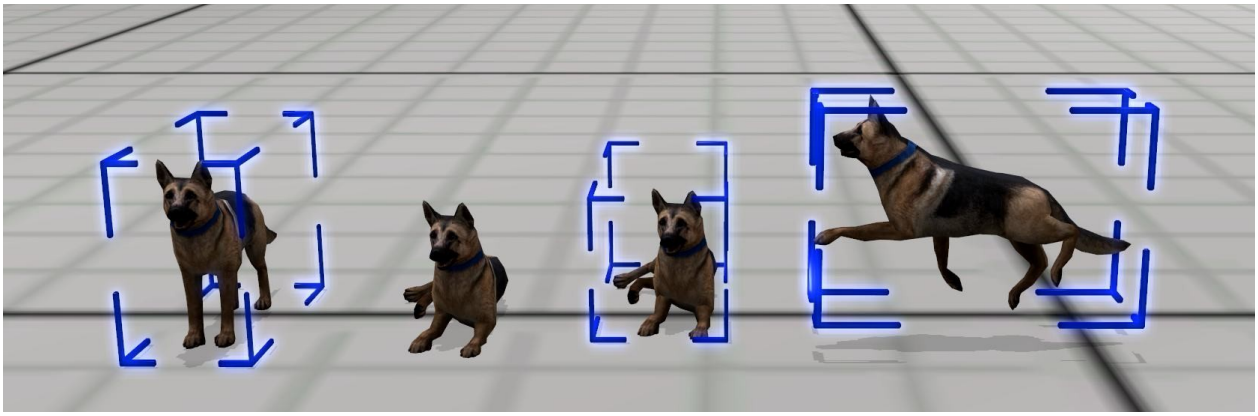
Dimensions:	700m by 700m
Length of railway tracks:	8.161 km
Length of roadways:	20.979 km
Number of models:	3579
Number of rolling stock:	78
Number of real estate structures:	3342

Lua Script
Using only the base models of EEP17 and those of this plug-in.

Other models also present:

- 3 animated men in different poses

- 4 animated German shepherds with different poses



Static structures →Equipment→Perimeters:

Road tunnel - concrete block (SM2)
Road tunnel - concrete triangle (SM2)
Road tunnel - concrete plate (SM2)

New features allowed by plug-in 3 for EEP 17.3 :

New possibilities offered for loading and unloading goods:

The plugin 3 for EEP 17.3 expands the possibilities related to loading, unloading, and transportation of goods.

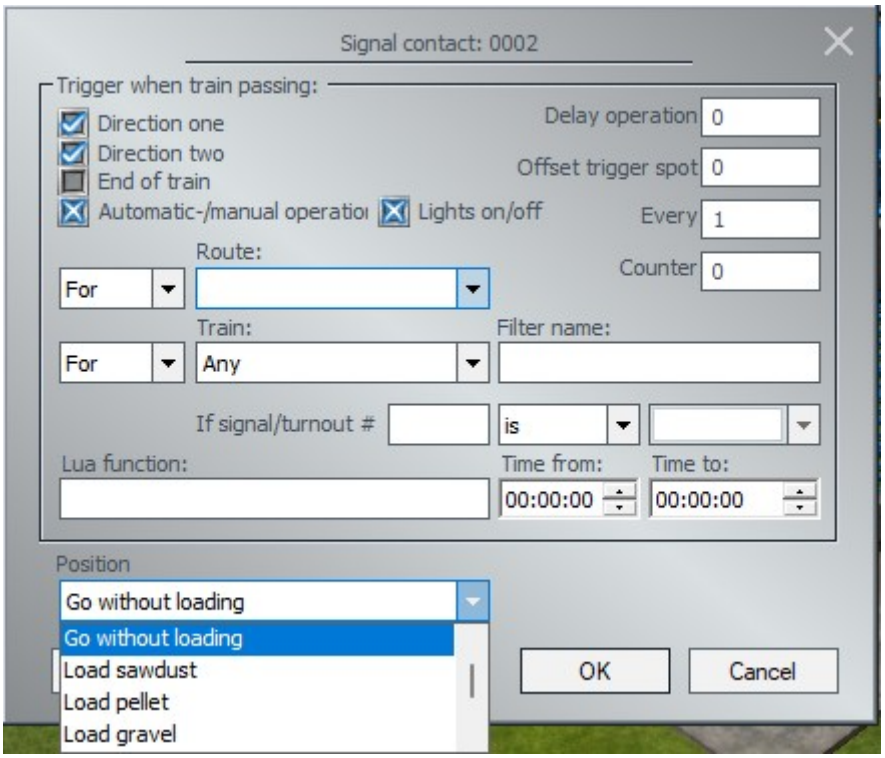
It is now possible to load and subsequently unload Innofreight containers using their specific system.

To do this, two specific modules, one with loading function and the other with unloading function, have been created for the occasion. (Refer to the description of the new included models)

The containers can be loaded with:

- Sawdust
- Pellets
- Gravel
- Coal

Of course, the ground of the unloading area also takes on the color of the transported goods when the containers are emptied.



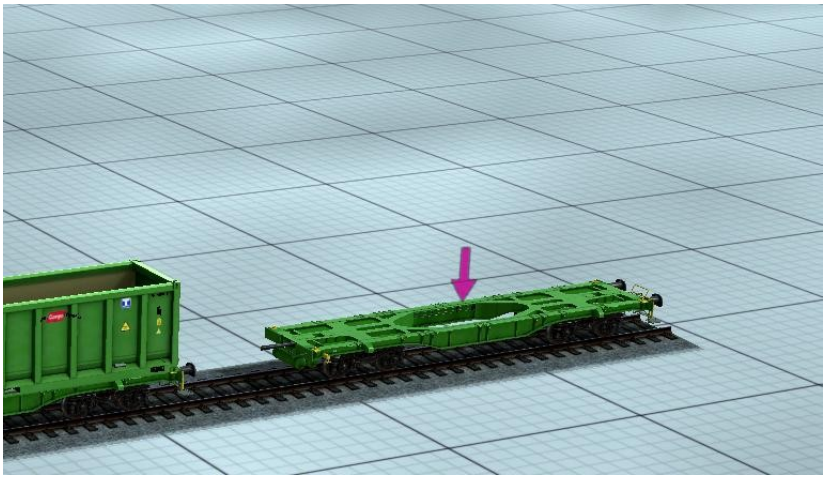
The Lua scripts necessary for proper functioning are already integrated into the signal menus.

It is also possible to control the signal via Lua (for example, the duration of the flow, the type of loading). Please refer to the "New in Lua" section for more information.

Management of signal via contact points is also possible.

Another simplification concerns the assistance in placing containers on wagons. The containers can be precisely positioned on the wagons if, when dropping a previously selected container,

the Shift key is held down. Once you are over a possible location on the wagon, a pink arrow will appear. A simple right-click of the mouse confirms your choice and the container is placed at the desired location.



Note: You will eventually discover that this functionality is also available on the wagons you have owned for some time. However, note that precise placement of goods requires specific construction of the models. Loading locations must have been specifically signaled during the construction of the model. As a result, you will place the goods on your wagons, but not necessarily in an exactly centered manner.

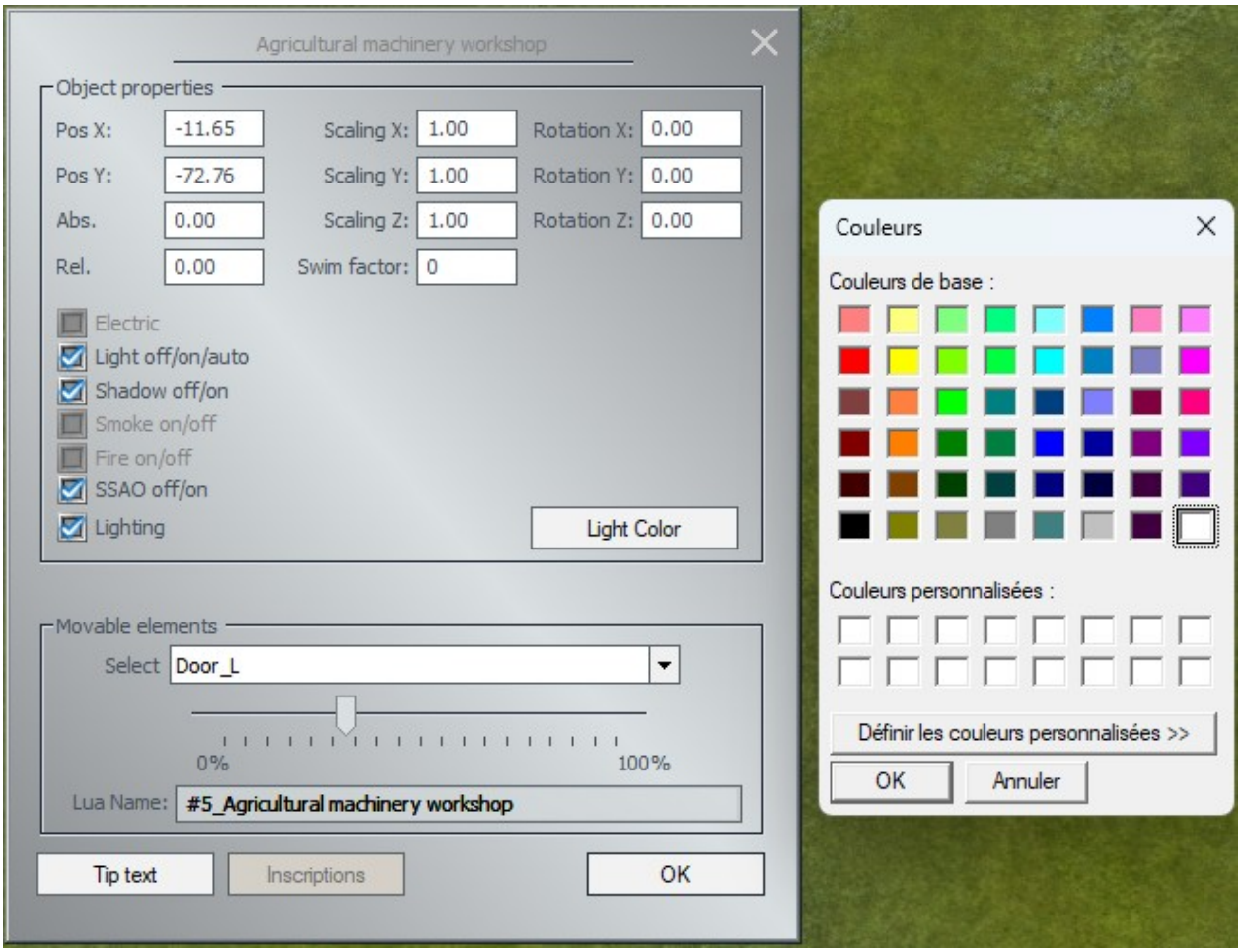
Extended customization of additional light source for real estate objects or landscape elements

With plugin 2 for EEP 17.2, an additional supplementary lighting for buildings and landscape elements has been made available.

This functionality has been further expanded with plugin 3 for EEP 17.3, resulting in the ability to define the color of the additional light source from the object's parameter menu.

As a reminder, first check the Lighting box and then click on Light Color to select one of the colors or even customize the color using its RGB values.

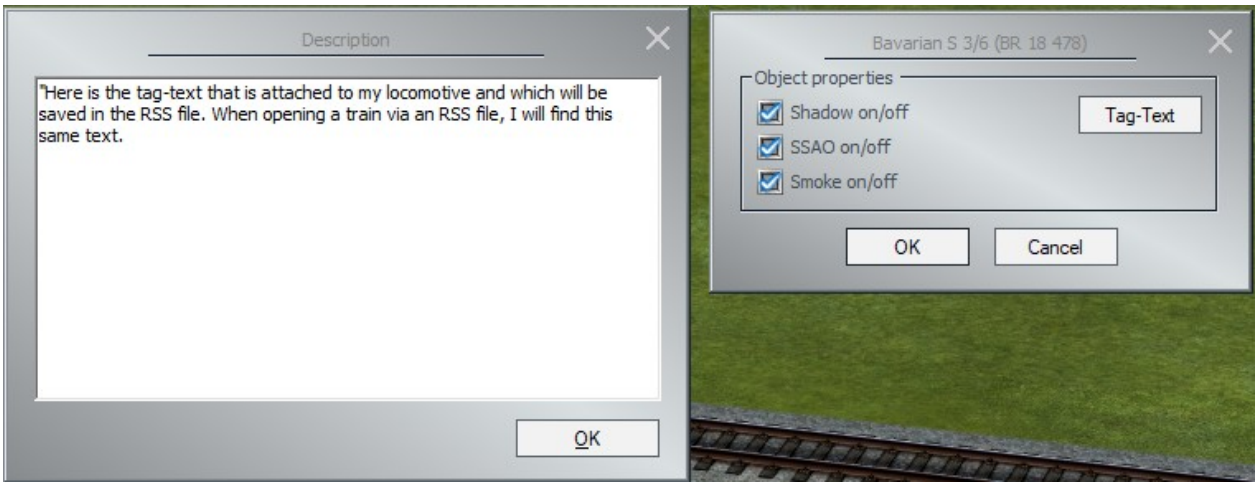
Then right-click on the object in question and adjust the lighting angle according to your needs.


Agricultural machinery workshop
Object properties
Pos X: -11.65
Pos Y: -72.76
Abs. 0.00
Rel. 0.00
Scaling X: 1.00
Scaling Y: 1.00
Scaling Z: 1.00
Swim factor: 0
Rotation X: 0.00
Rotation Y: 0.00
Rotation Z: 0.00
Electric
Light off/on/auto
Shadow off/on
Smoke on/off
Fire on/off
SSAO off/on
Lighting
Light Color
Movable elements
Select Door_L
0%
100%
Lua Name: #5_Agricultural machinery workshop
Tip text
Inscriptions
OK
Couleurs
Couleurs de base :
Couleurs personnalisées :
Définir les couleurs personnalisées >>
OK
Annuler

Backing up tag-texts with .rss files for rolling stock

The plugin 2 for EEP 17.2 made it possible to individually manage the emission of smoke, shadow production, and SSAO processing of rolling stock but also allowed adding a tag-text both in 2D and 3D modes.

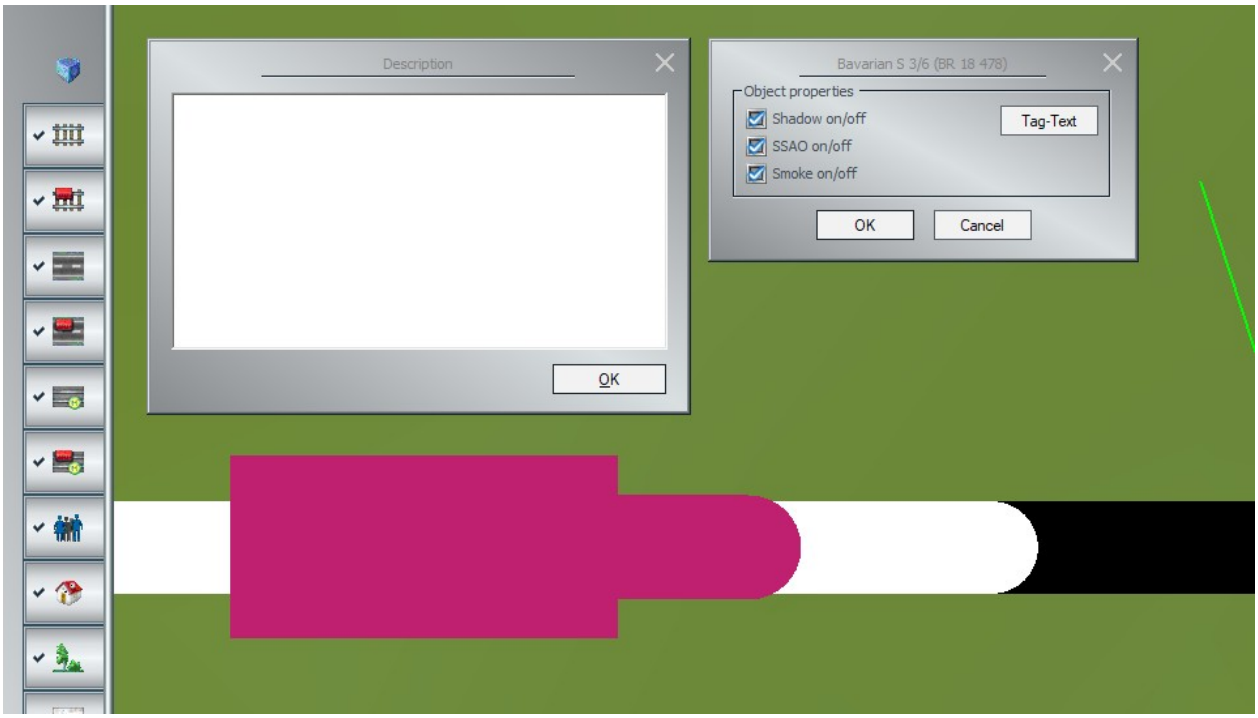
With the plugin 3 for EEP 17.3, these tag-texts are also taken into account when saving a convoy in the form of an .rss file.



To access this feature from the 2D mode, you necessarily need to be in the project presentation editor (the one with the blue dice) so that all the editors, meaning all model categories, are selected.

This editor serves as the "rolling stock" editor.

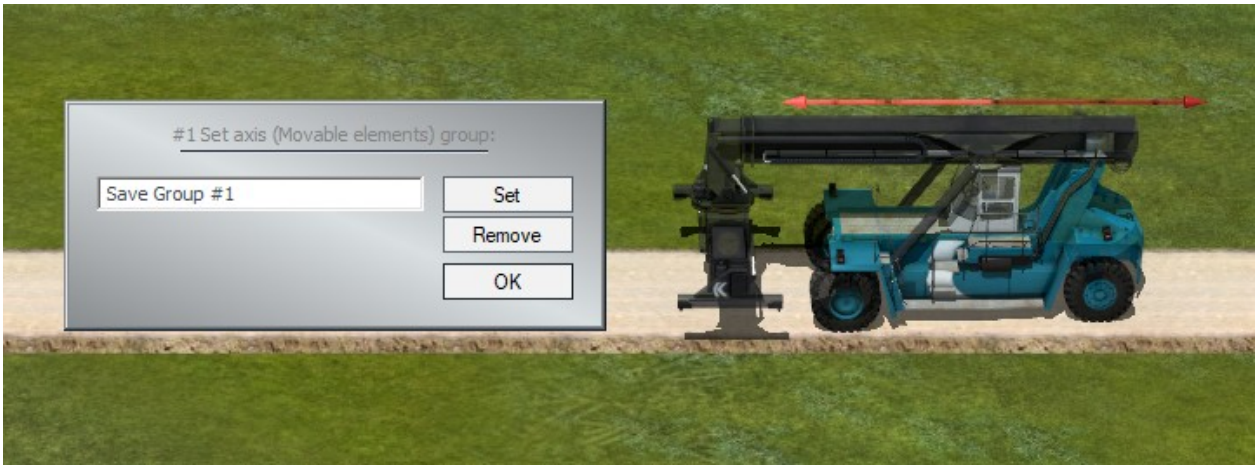
Then proceed as in the 3D display mode, right-click on the rolling stock whose smoke, shadow, SSAO processing options you want to edit, or to which you want to add a tag-text. This option will be available to you from the object's properties menu.



Inserting tag texts to name a set of axes

It is possible to save the position of the various axes of a piece of rolling stock into sets of axes. However, when we wanted to sequence various sets of axes to animate, for example, a loading or unloading, it was difficult to have an overview of which axis group performed which function.

To better differentiate the missions you have allocated to your axis groups, it is now possible thanks to Plugin 3 for EEP 17.3 to add tag texts to the axis groups.



Check the "Lighting" box in the object properties.

New block functions

Plugin 3 for EEP 17.3 offers two new configuration options for blocks.

- The new option "Electrify tracks"

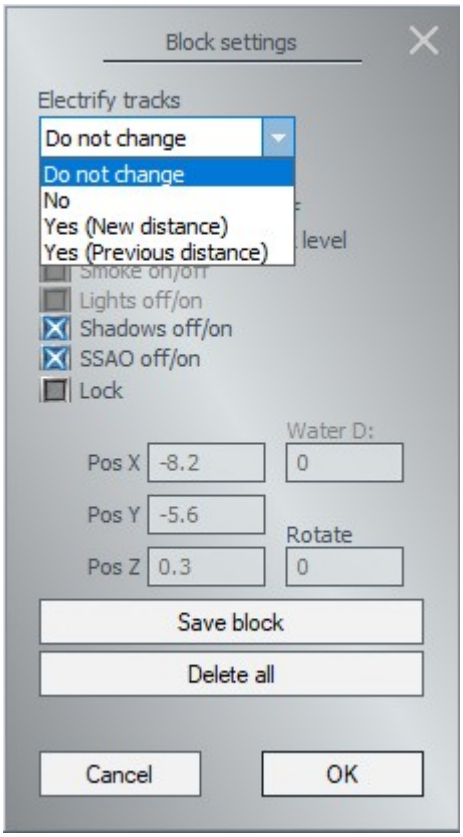
with the following possibilities:

- Do not change
- No
- Yes (New distance)
- Yes (Previous distance)

- The "Lock" option

which locks the elements of the block against any accidental modification.

This menu is available after marking a block in 2D display mode and then right-clicking on the marked block to display the context menu.

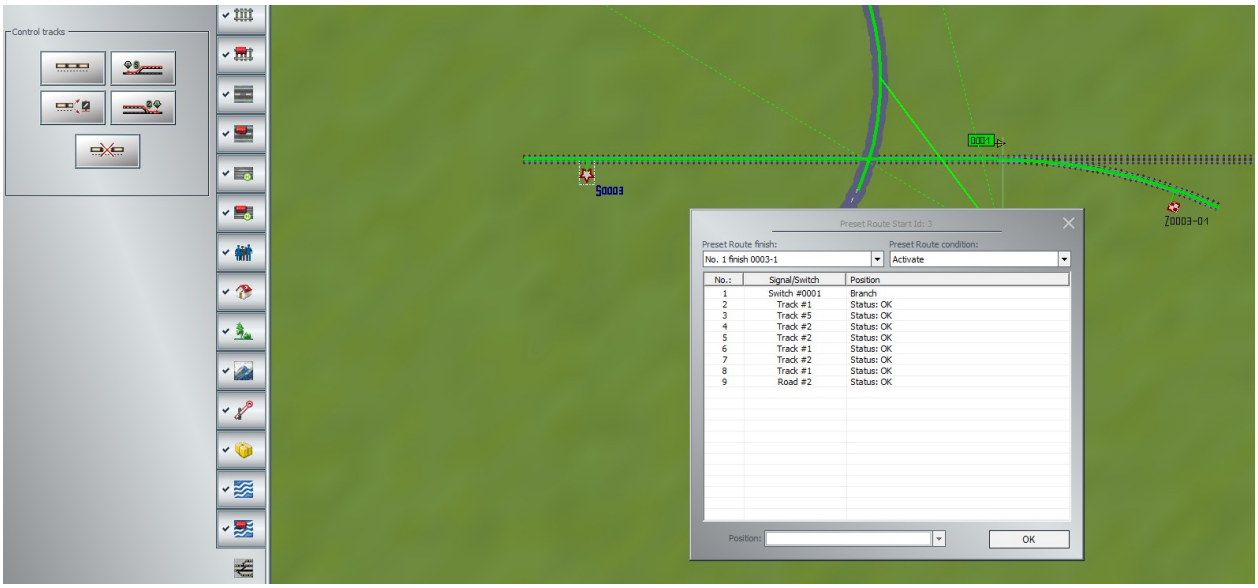


Taking into account splines from other editors when creating routes

With Plugin 3 for EEP 17.3, it is now possible to integrate different types of tracks within the same route. Thus, a roadway can be queried for its availability (its occupation) while the route is actually made up of railway tracks.

This can be useful, for example, in industrial areas, specifically around unloading areas, where equipment such as pallet trucks can circulate over often unprotected railway tracks.

A unique ID is now assigned to each type of track (ID #1 for railway track can thus coexist with ID #1 for road).



Quick reminder on how to proceed:

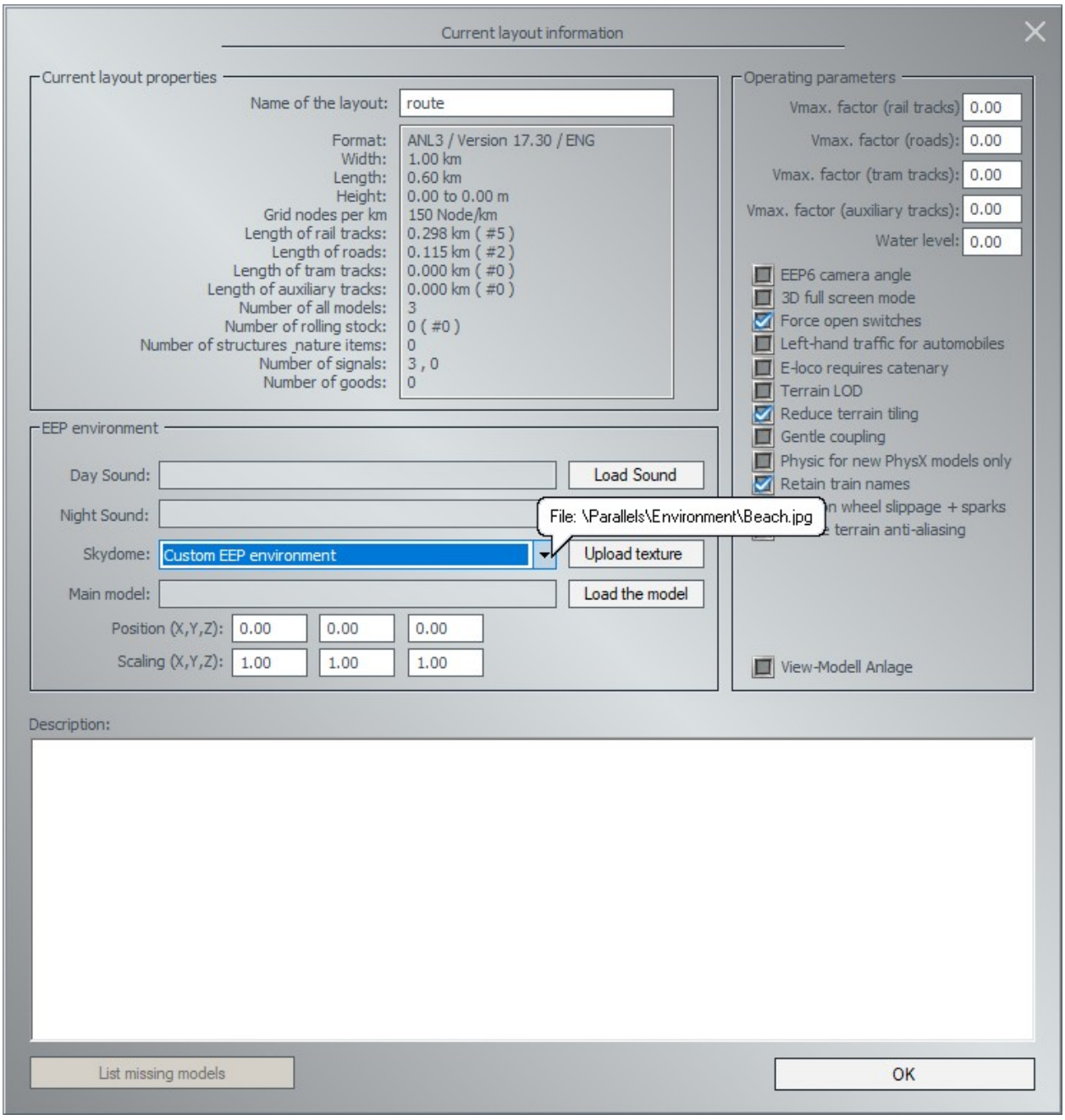
1. In 2D mode, activate the predefined route editor.

2. Place a start flag "S" followed by an end flag "Z". If all switches etc. are correctly defined, the route is created.

3. Once the route is created, activate it by clicking on the start flag, for example, then hold down the Ctrl key to add all other elements (even tracks of different types and signals that you consider important) that will be queried before releasing the route.

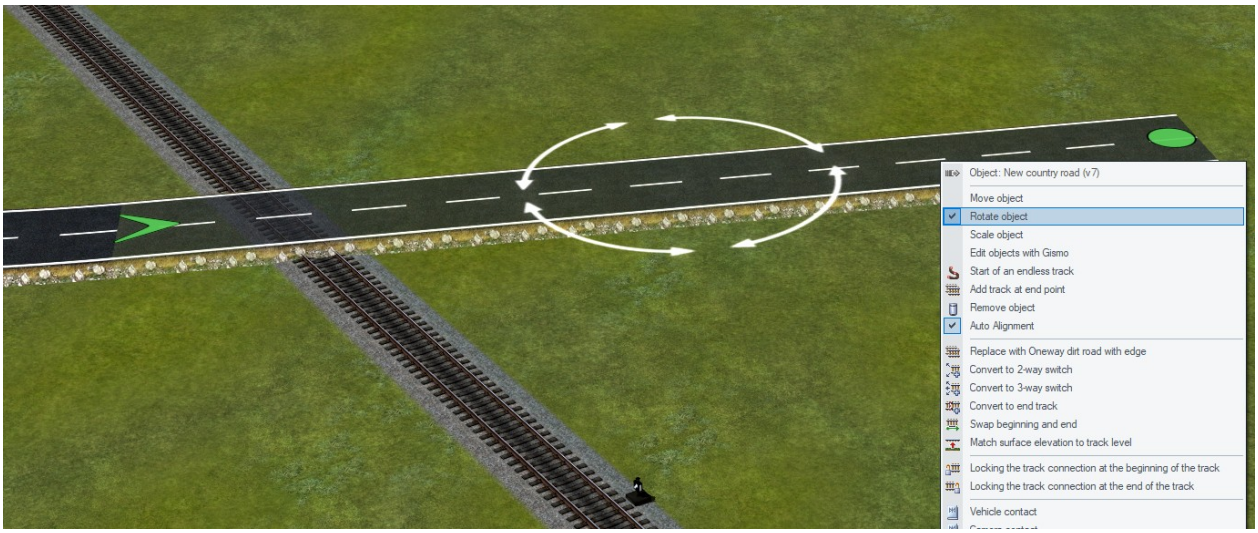
Displaying the name of the Skydome texture

From the Project Information menu, the name and location of the file used for the EEP skydome are now displayed in a tooltip that appears after a few seconds.



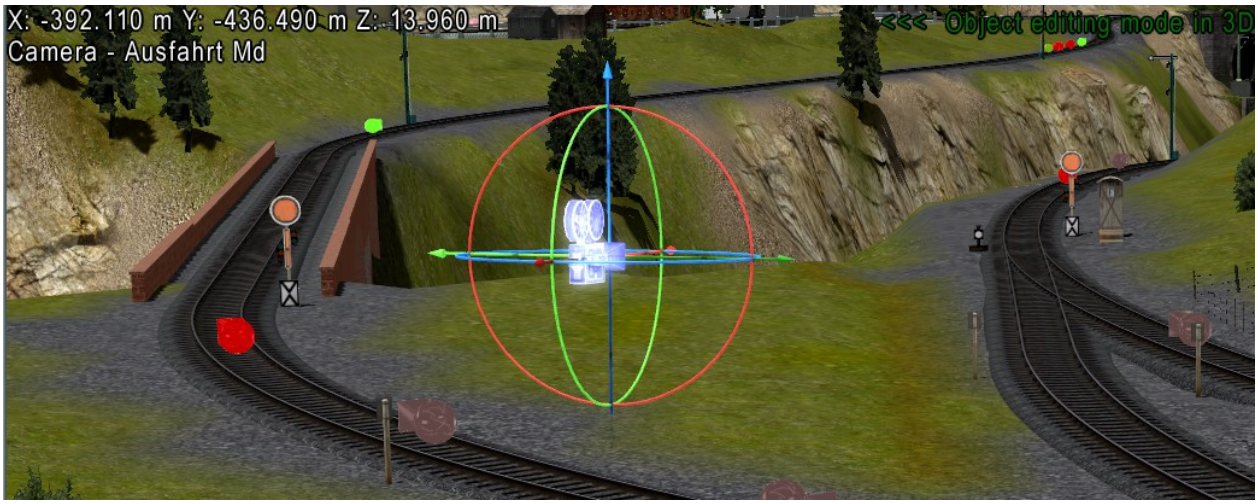
Improvement in model editing

An aid for rotating objects in 3D display mode has also been added with Plugin 3. Whenever a track, building structure, landscape element, or cargo is selected, and rotation is requested from the context menu, a simple double-click allows the element to rotate by 90°.



Camera control

Plugin 3 has brought improvements regarding the fineness of the camera zoom step. This will enable you to take screenshots of your layouts with careful composition



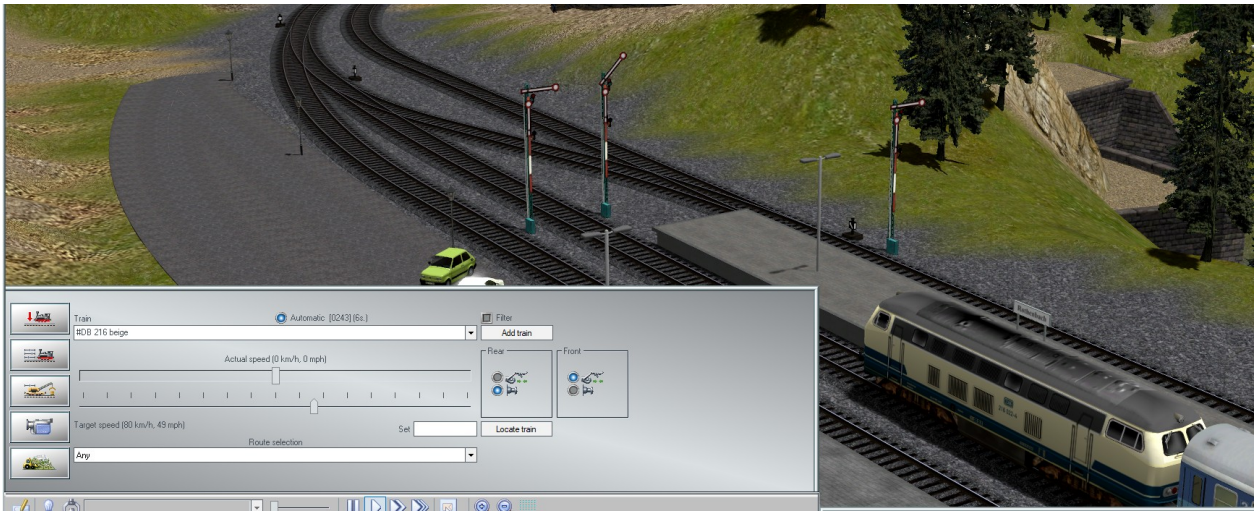
To achieve finer camera zoom control, simply go to 3D display mode, hold down the Ctrl key, and adjust the mouse wheel.

Additionally, the camera's name is now displayed once it's selected in editing mode.

Additional information in the control dialogue:

In the control dialogue box, the target speed of the train is displayed in the speed indicator.

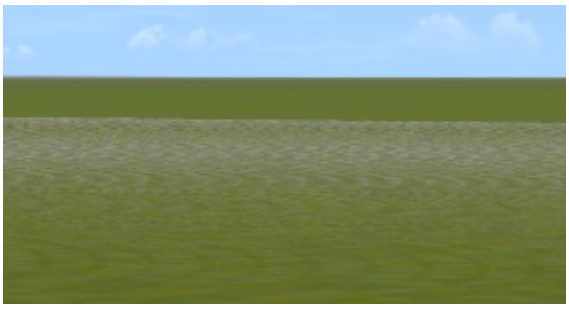
If the train is stopped in front of a signal where a delay in departure has been defined, then the remaining time before the actual departure of the train is indicated as a countdown next to the "automatic" indication.

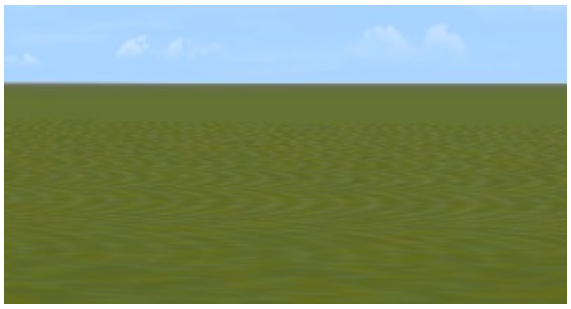


Visual Rendering Adjustment

The new feature "Disable terrain antialiasing" available in the project settings under File → Project Information improves the visual rendering of layouts.

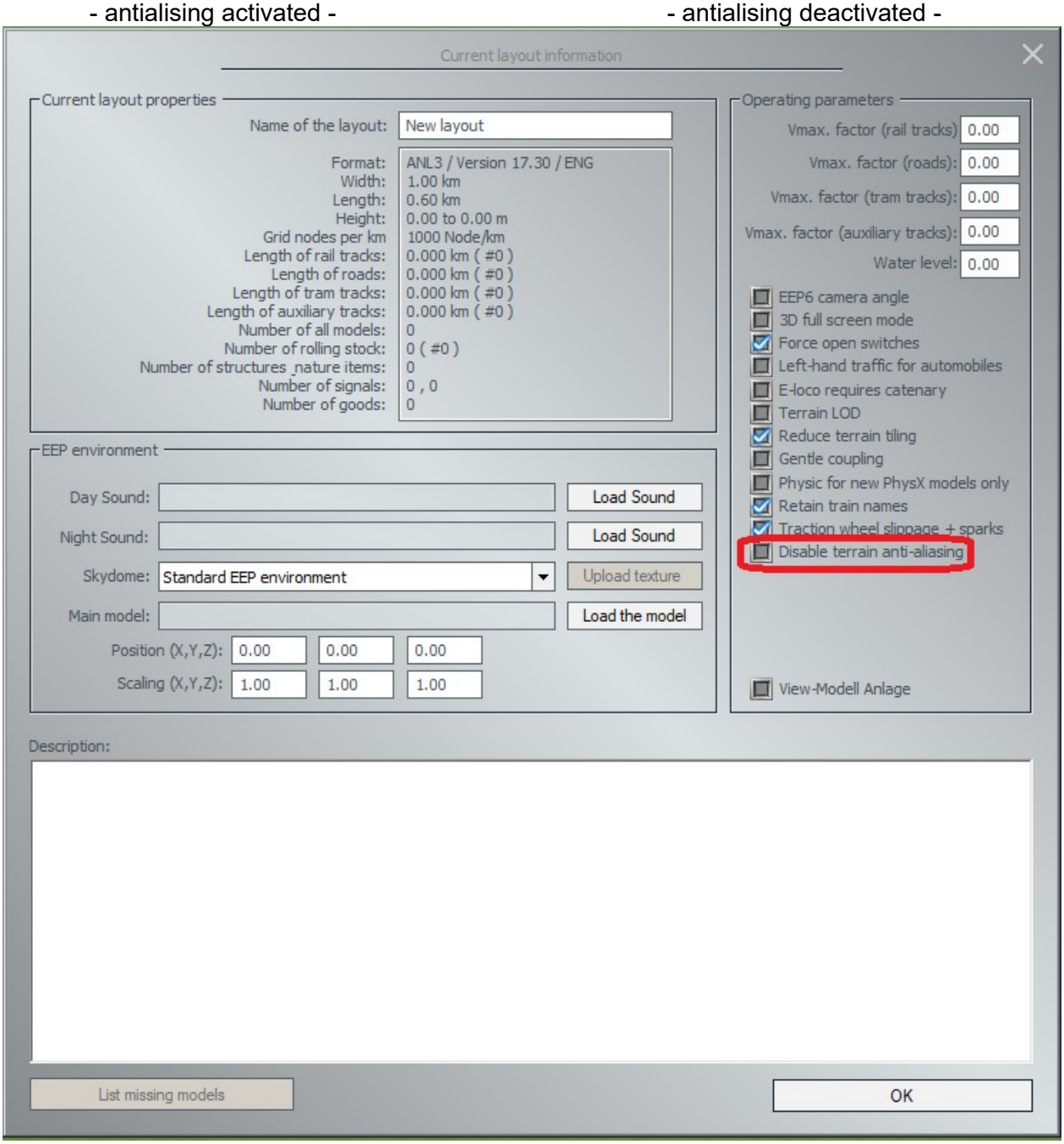
Particularly noticeable in flat environments with a high density of nodes per kilometer, this "white haze" on the horizon can now be removed by disabling terrain antialiasing.





- antialising activated -

- antialising deactivated -



Switching between 2D and 3D Mode

Previously, switching from 2D display to 3D display while in editing mode would sometimes cause rolling stock to move a very small distance (1 frame), which was sufficient to occasionally trigger a contact point.

Now, no rolling stock will continue its movement when switching to the 3D window if editing mode is active.

Saving the last selected 3D display mode.

When saving a layout, the 3D display mode (editing mode or play mode) is now considered. When opening this project and potentially switching to 3D display mode, you will find the 3D mode in which you saved the project.

Lua offers new functions specific to EEP.

Plugin 3 for EEP 17.3 provides the following new Lua functions:

EEPSetSignalStopDistance()	**EEPSetSignalStopDistance(ID, Stop_Distance)**
Parameters	two
Returns	one
Requires	EEP 17.3 Plug-in3
Purpose	Assigns a stop distance to the specified signal.
Notes	• First parameter is the ID of the signal. • Second parameter is the new stop distance in meter. If a negative value is entered, the stop distance is set to zero. • Return value is true if the signal exists, false if it doesn't.

```
ok = EEPSetSignalStopDistance(13, 45)
```

EEPGetSignalStopDistance()	**EEPGetSignalStopDistance(ID)**
Parameters	one
Returns	two
Requires	EEP 17.3 Plug-in3
Purpose	Returns the stop distance to the specified signal.
Notes	• Parameter is the ID of the signal. • First return value is true if the signal exists, false if it doesn't. • Second return value is the stop distance in meter. • After *EEPSetSignalStopDistance()*, EEPGetSignalStopDistance() immediately returns the new stop distance.

```
ok, Stop_Distance = EEPGetSignalStopDistance(9)
print("Signal 9 has a stop distance of ",
Stop_Distance, " meter.")
```

EEPOnTrainStoppedOnSignal()		EEPOnTrainStoppedOnSignal(sigID, Train)

Parameters	two	`function EEPOnTrainStoppedOnSignal(sigID, train)`
		`  print("Train ",Train ," stopped at signal ".. sigID)`
		`end`

Returns	none	
Requires	EEP 17.3 Plug-in3	
Purpose	Is called whenever a "vehicles composite" stops at a signal.	
Notes	• First parameter is the ID of the signal. • Second parameter is the name of "vehicles composite" That has stopped at the signal. • The parameter names can be freely selected. • EEP does not expect a return value when this function is called.	

EEPGetSignalFunctions()		EEPGetSignalFunctions(ID)
Parameters	one	
Returns	two	`ok, Number = EEPGetSignalFunctions(14)`
Requires	EEP 17.3 Plug-in3	
Purpose	Returns the number of signal functions defined in the NOS.	
Notes	• Parameter is the ID of the signal. • First return value is true if the signal exists, false if it doesn't. • Second return value is the number of signal functions defined in the NOS. This is	

EEPSetColourFilter()		EEPSetColourFilter()
Parameters	four	`EEPSetColourFilter(hue, saturation, brightness, contrast)`
Returns	none	
Requires	EEP 17.3 Plug-in 3	
Purpose	This function is only used to temporarily set the colours e.g. after a change of the camera shot, and not to permanently change the programme settings	
Notes	• First parameter corresponds to the hue setting in the programme settings. • Second parameter corresponds to the saturation setting in the programme settings. • Third parameter corresponds to the brightness setting in the programme settings. • Fourth parameter corresponds to the contrast setting in the programme settings. • **Attention: The parameters are <u>not</u> transferred to the programme settings** • This function has no return value.	
	2 -> Clear/Main/Run and, if the signal has a speed control, e.g. 1025 -> Max. speed 25 km/h 1040 -> Max. speed 40 km/h 1100 -> Max. speed 100 km/h depending on the design of the signal. • The return values correspond to the values entered in the NOS by the designer.	

Closing remarks

Many wishes of experienced EEP users and designers have been incorporated into the development of Plug-In 3 for EEP 17.3. The innovations facilitate both the construction and the operation of your layouts.

The Lua extensions also open up completely new possibilities to automate your layouts.

We hope you enjoy this first plug-in to EEP 17.2.

Your EEP-Team of Trend Verlag