

# Manual to Plug-in 3 for EEP 16.3

Dear customers, first of all we would like to heart-fully thank you for purchasing Plug-in 3 to EEP 16.3.

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*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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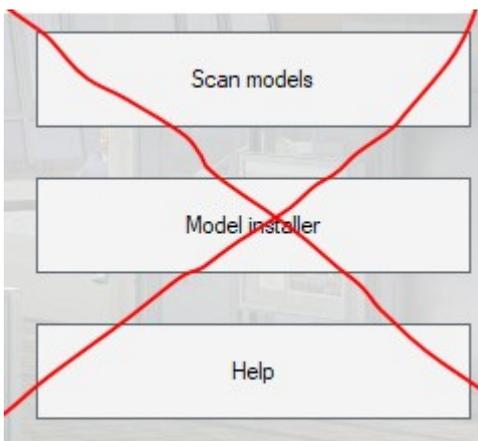
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## Installation instructions

Please make sure that update #3 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.



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 EEP16.3"

***If necessary, please close your EEP 16.3***

Please start installing the Plug-in by double clicking on the file **V16TSP10053**.

A message informs you that this program will operate changes to your computer. Please allow these 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 16.3

If the installation was successful, then you will see in the lower left part of the launch window the EEP 16.3 version followed by the mention Plugins 3



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## New models contained in Plug-in 3 for EEP 16.3:

### **Track style : railroad tracks**

Brick railway viaduct 1/3

Brick railway viaduct 2/3

Brick railway viaduct 3/3

Steel railway viaduct 40m

Steel railway viaduct 40m (no track)

### **Track style : auxiliary tracks**

Brick railway viaduct 1/3

Brick railway viaduct 2/3

Brick railway viaduct 3/3

### **Track style : roads**

Concrete viaduct 1/4

Concrete viaduct 2/4

Concrete viaduct 3/4

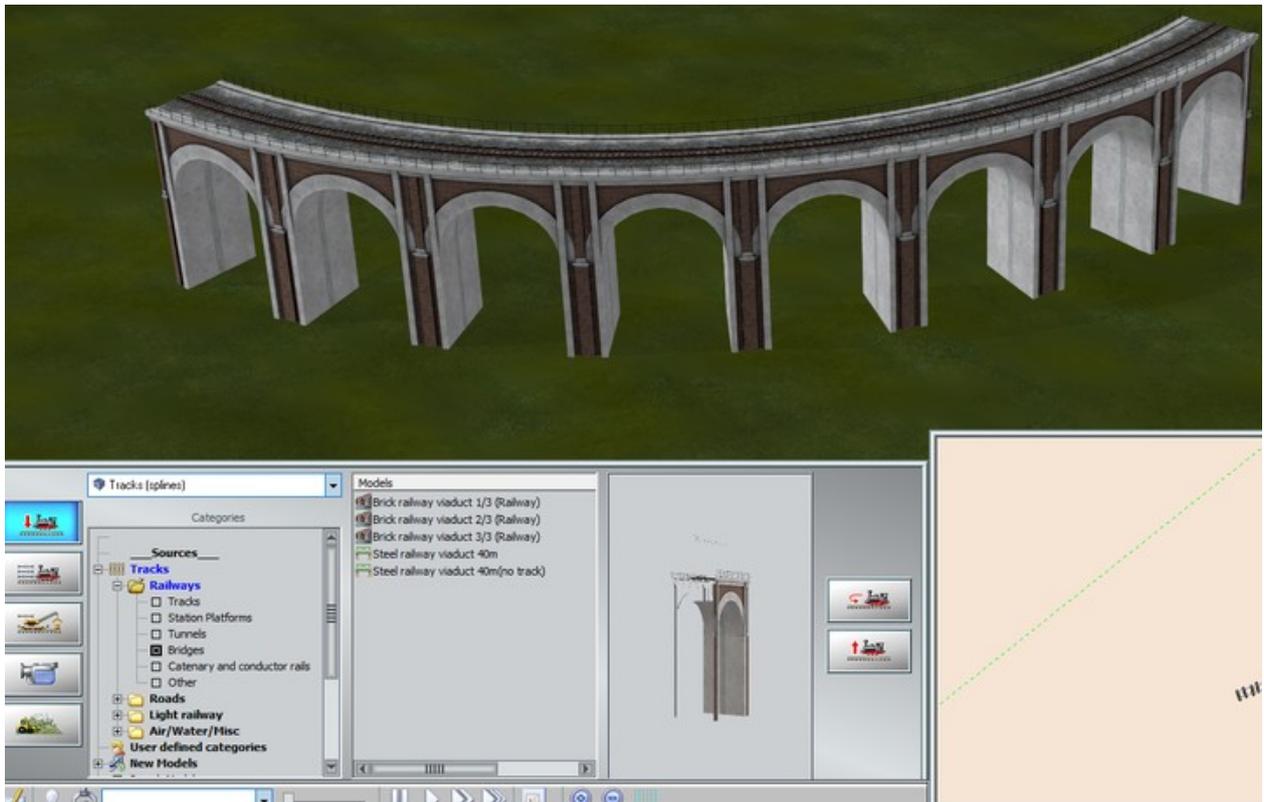
Concrete viaduct 4/4

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## New functions :

### New track style : the 3D track

This brand new type of track allows you to build bridges, station platforms, tunnels, and so on, and to lay and shape them in the same way as you would lay rails or tracks. These new tracks can also be bent.



Supported from Plug-in 3 onwards, these 3D tracks can be equipped with structures called track-objects. These structures placed at the beginning or the end of the track will act as the start or the end of a bridge or the start or the end of a station platform.

This is a very useful feature and has been particularly expected by EEP users. It will facilitate the junction with other types of tracks and can hide the transitions between a model and the layout's surface.

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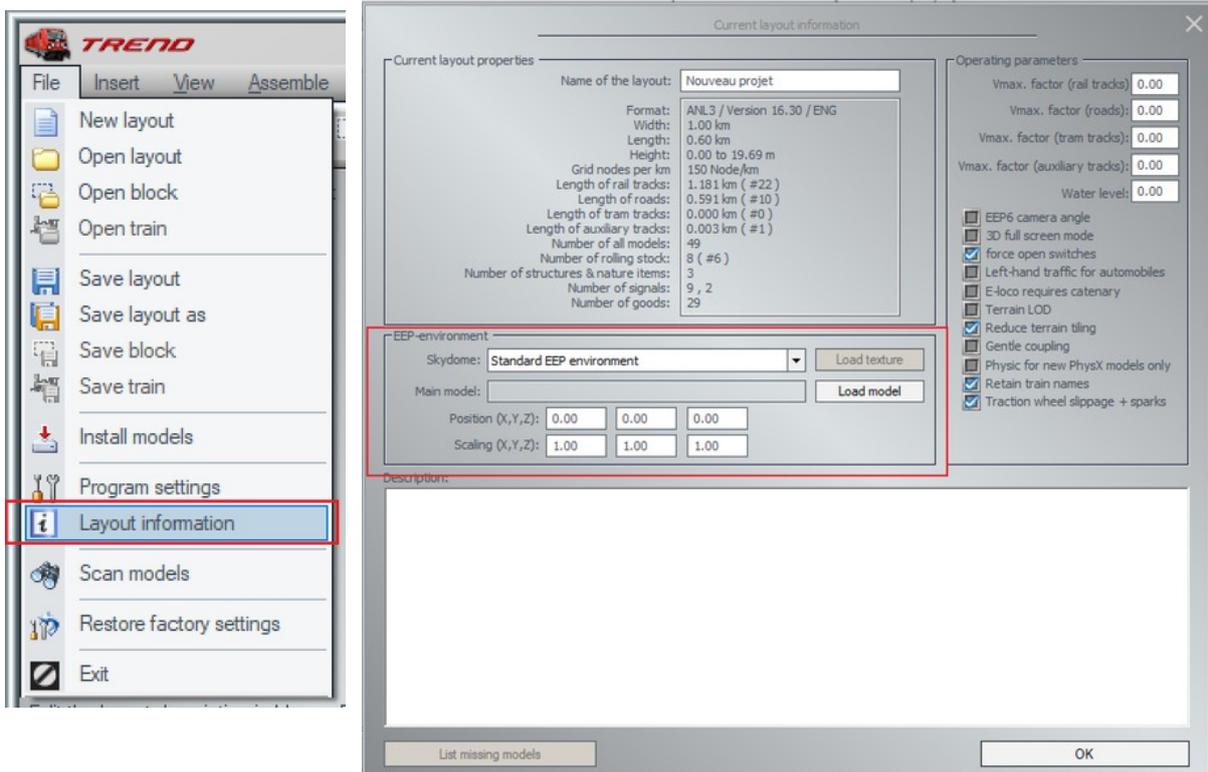


Track-object at end of the track

Track-object at beginning of the track

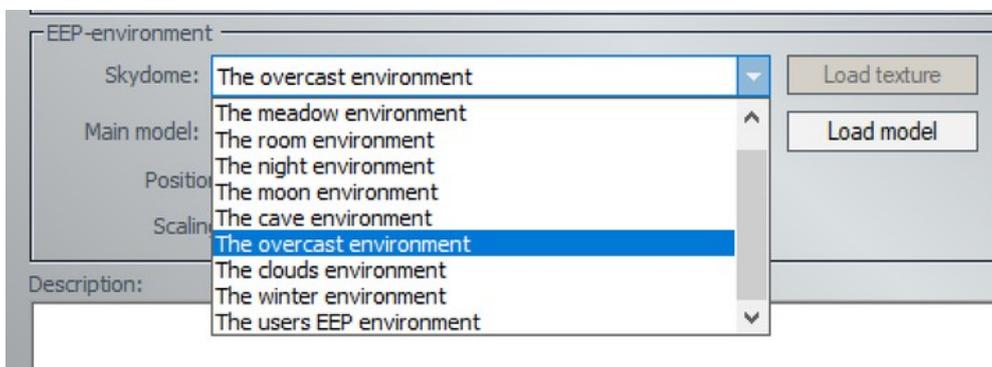
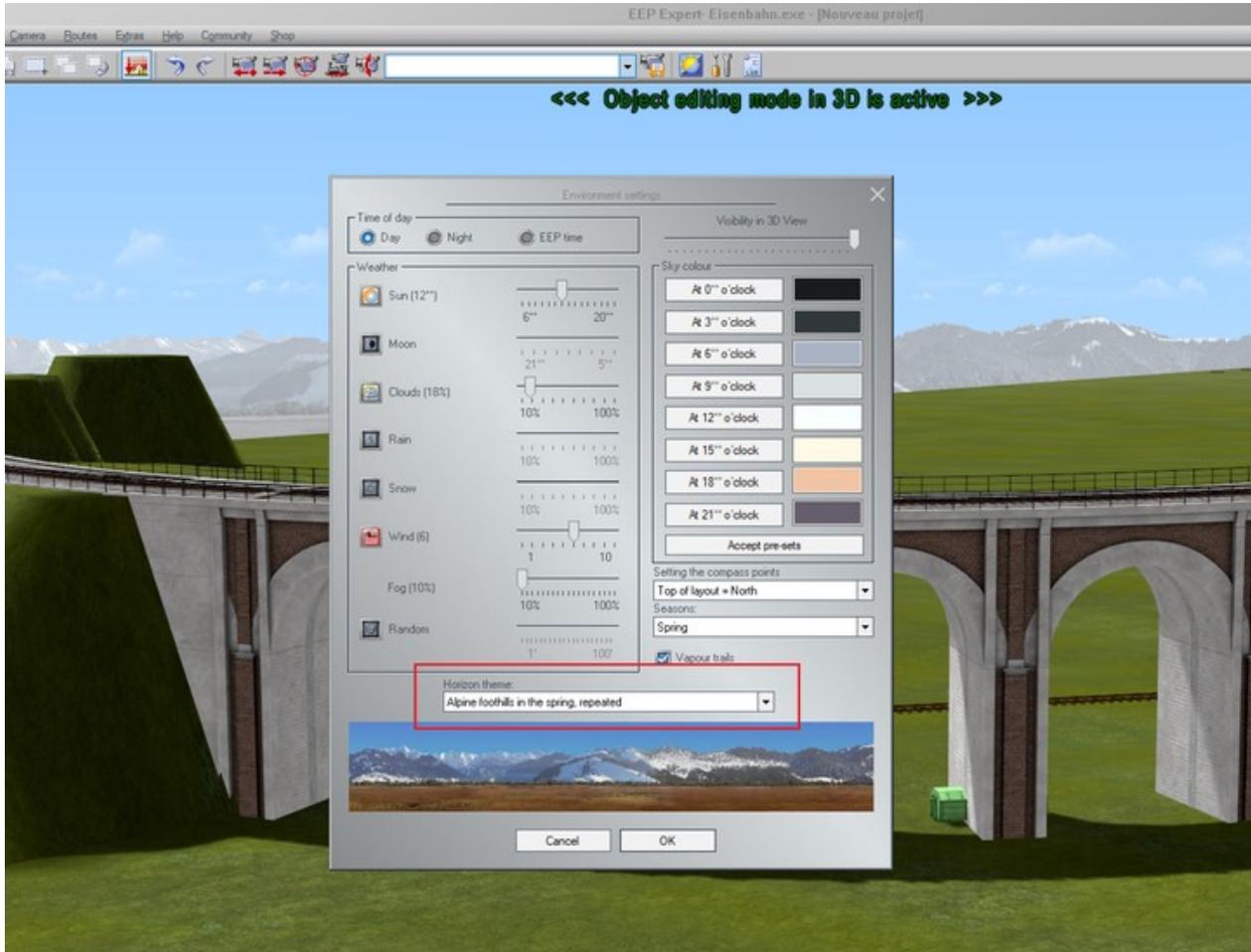
## EEP environment selection

In the « current layout information » dialogue window a new field gives you the possibility to change the EEP environment by loading one out of the available 3D landscape or sky models.



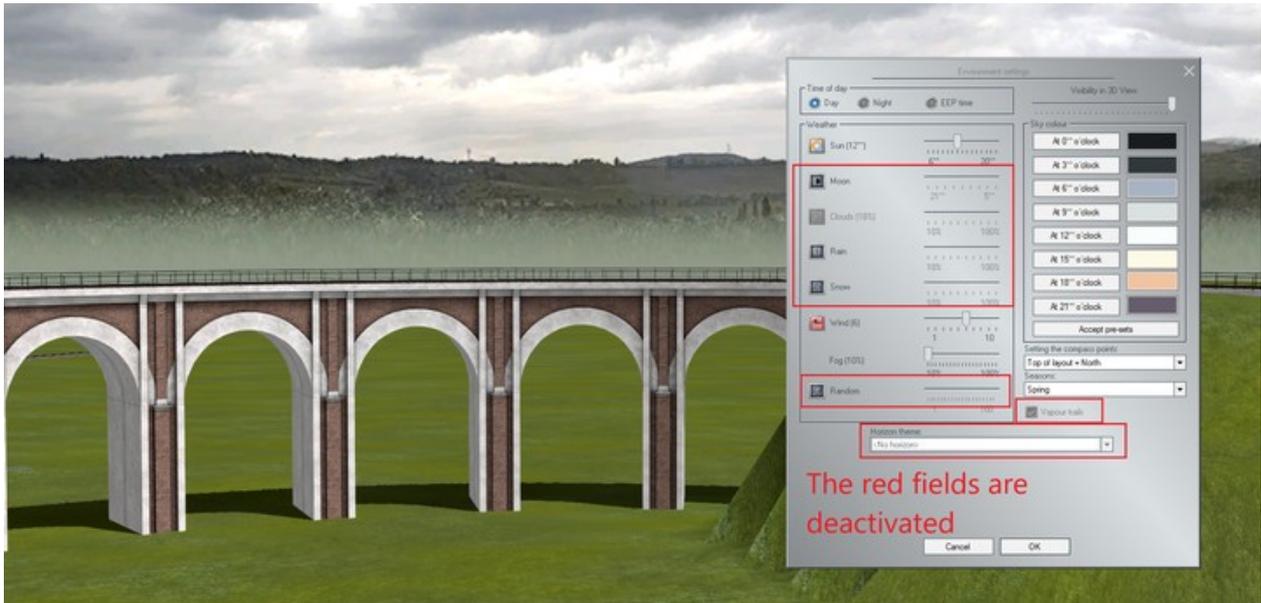
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If "standard EEP environment" is selected in the Skydome selection menu, then no external model is loaded and a horizon theme can be selected from the "Environmental settings" command window.



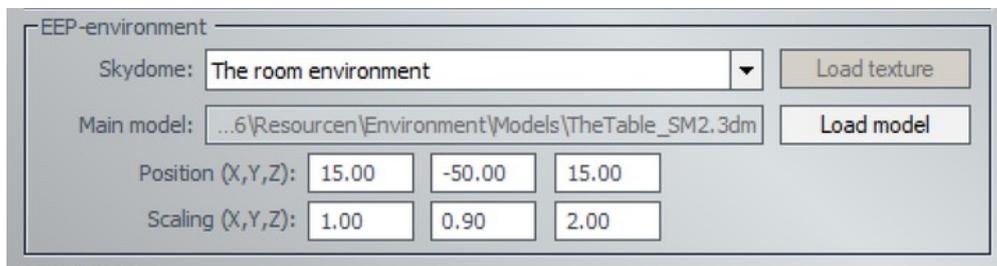
When in the Skydome selection menu a value other than the standard EEP environment is active, e.g. the overcast environment, your EEP installation will display the corresponding environment and the horizon selection field from the environmental settings command window will be deactivated. In this case even clouds, rain, snow, rainbows, meteorites, vapour trails will no longer be visible.

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As soon as you have validated your selection in the skydome menu, the chosen environment will be used by your EEP installation.

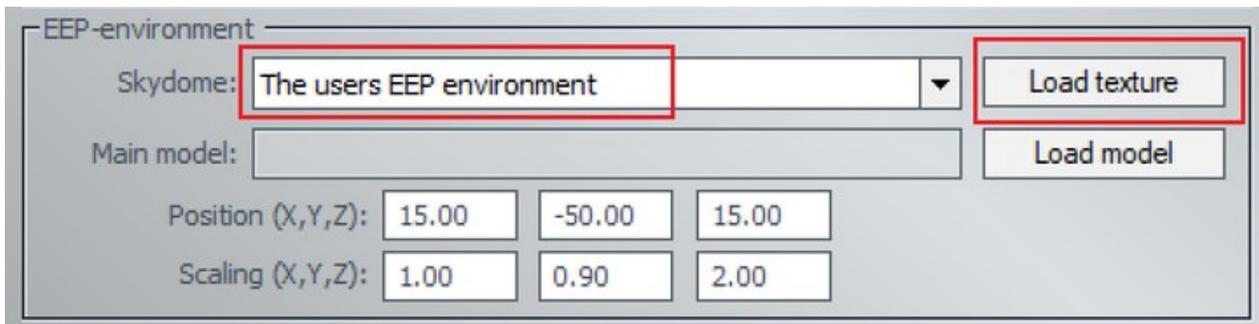
If you select the room among the environments that can be selected in the skydome menu and also add a table, then your EEP installation will be on a table in the middle of a room. The position and scaling allows you to adapt the table to your installation's size.



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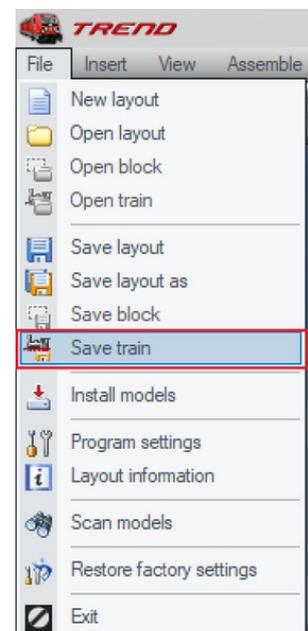


If you are not pleased with the pre-recorded environments, it is possible to load a 3D panorama of your own creation. Simply select the users EEP environment in the skydome menu and upload your photo.



### Save a train set and its goods as an RSS file.

You can now save a train set for later use by using the 'save train' function. This function now also takes into account the registration of goods that could have been loaded by the user into specific wagons. (From Plug-in 3 for EEP 16.3 onwards)



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So you can easily pick up a previously saved set from the "open train" in file menu and place it on your installation at the location of your choice, or even use this train set on other separate installations. Your freight cars will already be loaded with goods instead of being empty as in the past.

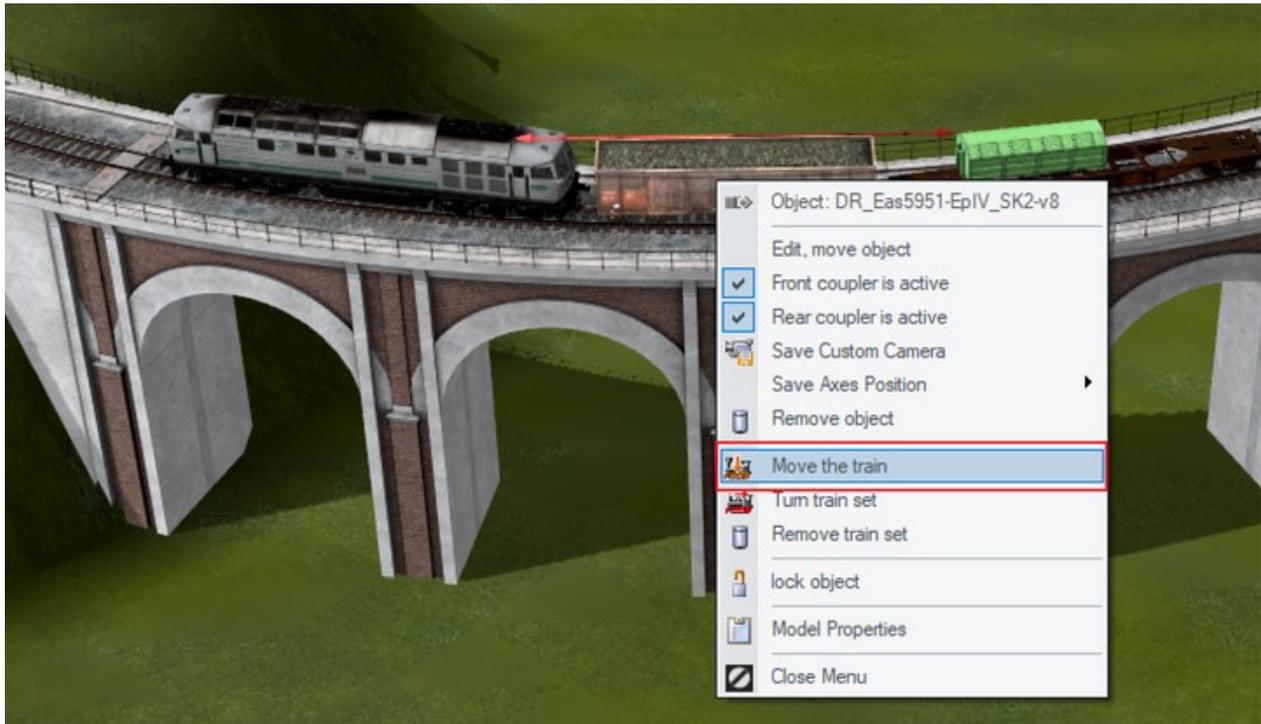


### Moving a whole train set on another rail

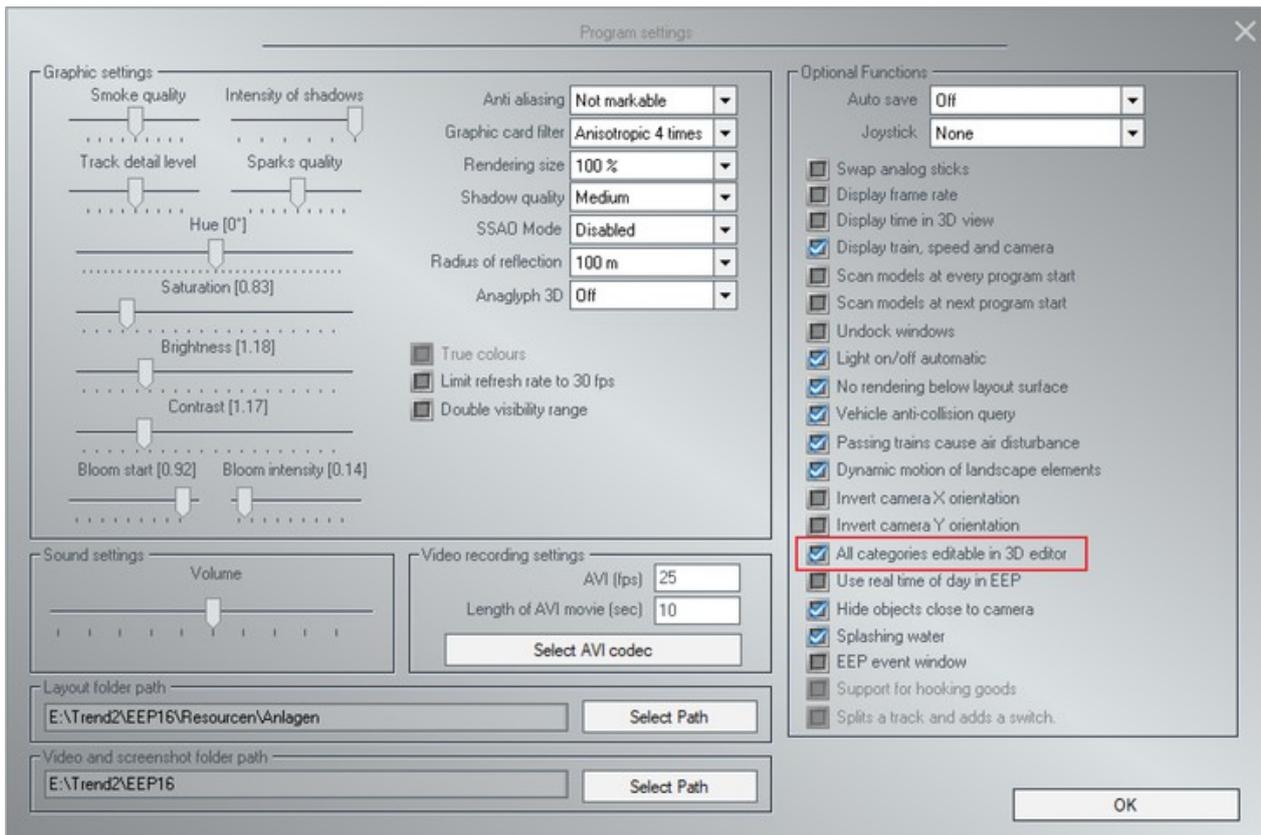
If you would like to move a whole train set to another nearby track or anywhere else on your installation, simply use the brand new "move the train" function that is visible in the context menu that you can bring up with a right mouse click on the train or any other rolling stock (car, truck) when you are in 3D display mode.

Then left-click on the second track which is intended to receive your train or rolling stock . The train will be moved to the desired location.

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Make sure that you have enabled the program setting " all categories editable in 3D editor" if you want to use this feature.

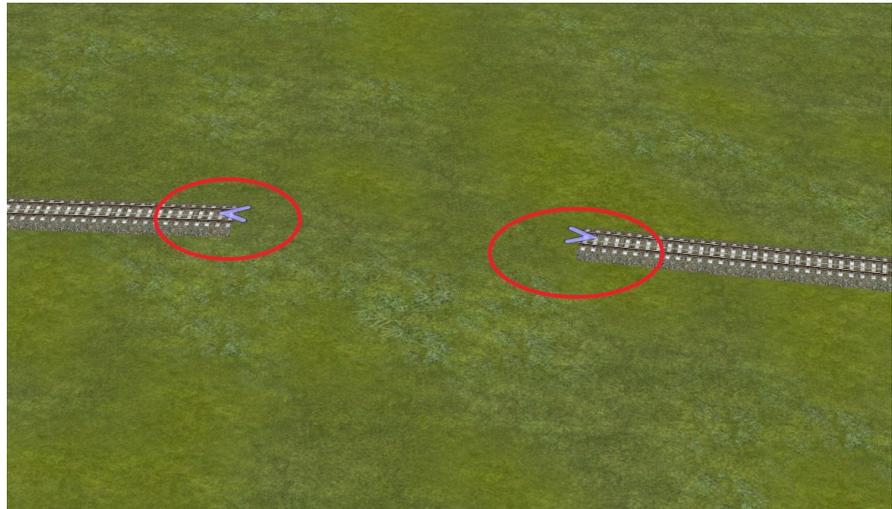
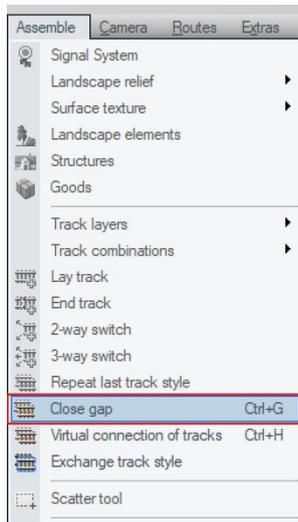


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## « Close Gap » function in 3D editing mode

From Plug-in 3 of EEP 16.3 onwards it is possible to use the close gap function previously only available in 2D display mode.

After having activated the close gap function in the Assemble menu, special markers will appear at all eligible track endings.



As in 2D mode, all you need to do is left-click on the eligible endings of the two tracks you want to connect, and the connection will be calculated and built.



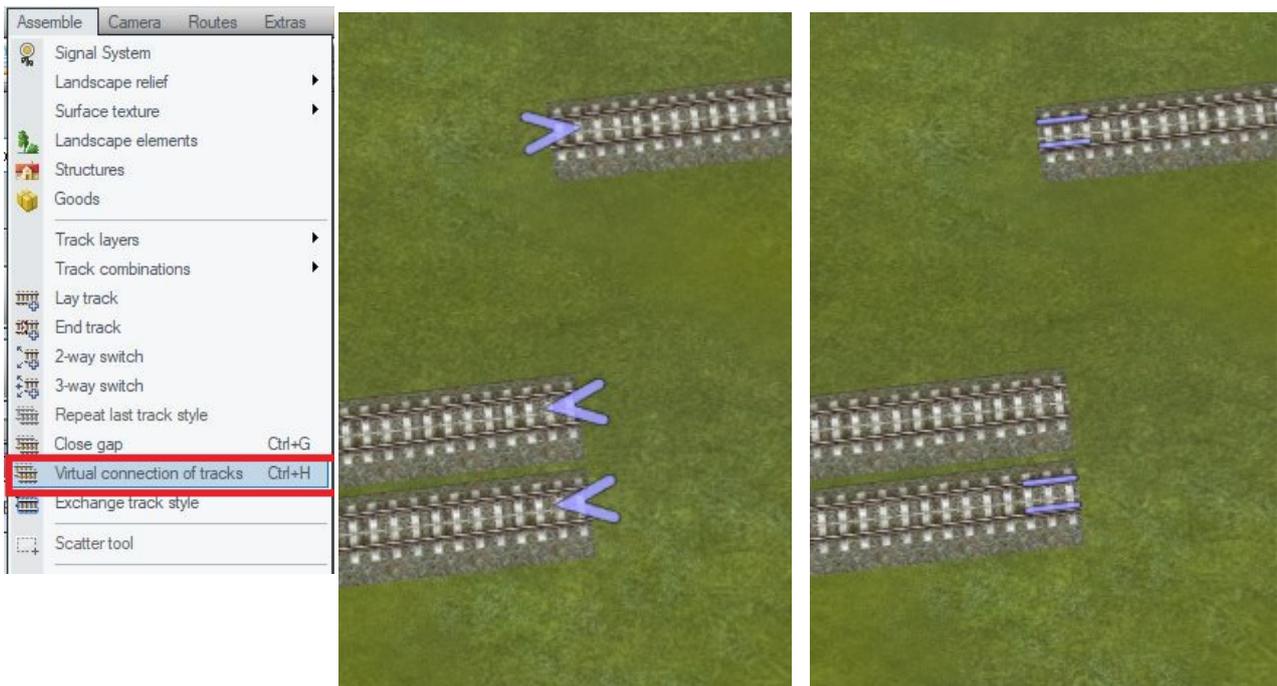
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## Virtual connection of tracks in 3D editing mode

This is another 2D editor mode feature which can now also be used in 3D editor mode thanks to Plug-in 3 of EEP 16.3. This feature can be activated from the "Assemble" menu "Virtual connection of tracks"

After having activated this function in the Assemble menu, special markers will appear at all eligible track endings.

Once you left-click on the eligible endings you want to connect virtually, the characteristic symbol of the virtual connection appears.



Eligible endings

Virtual connection set

## LUA : callback function extended with track number and the train's name



Just as with any Lua script, you must first define the corresponding function in the Lua script editor.

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Then set two parameters such as a and b. Within the function, "a" replaces the name of the train and "b" replaces the number of the track on which the contact is positioned.

```
LUA script editor
row: 16, column: 1

I=0
clearlog()

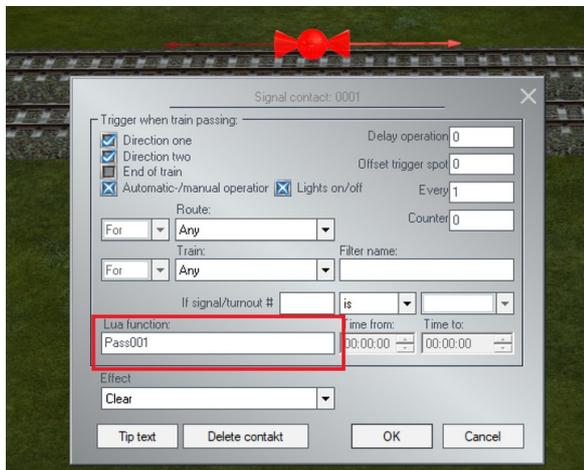
print("Hey let's start, EEP Version is: ", EEPVer)

function EEPMain()
  print("Counter: ",I)
  I=I+1
  if (I>9) then return 0 end
  return 1
end

function Pass001 (a, b)
  print ("Train: ",a, "Track: ",b)
end

Log signal events
Log vehicle events
Log switch events

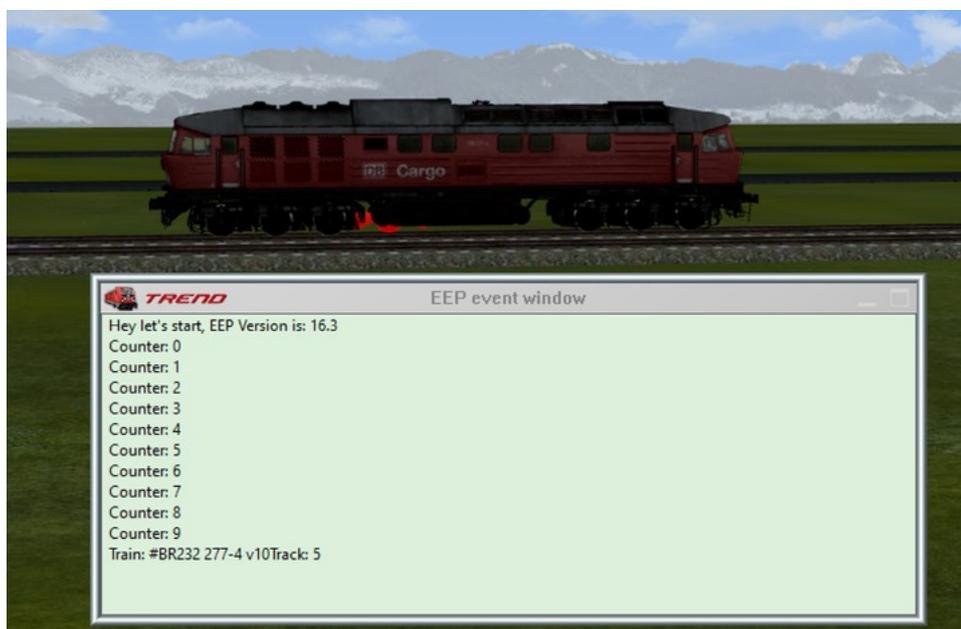
Load Lua script
Save Lua script
Reload script
```



You then need to give this function a name (here Pass001) and refer to it in the contact's property window

You can use the same Lua function for different purposes depending on the section of track you have equipped with a contact.

Once the train has triggered this contact switch, the following information is displayed.



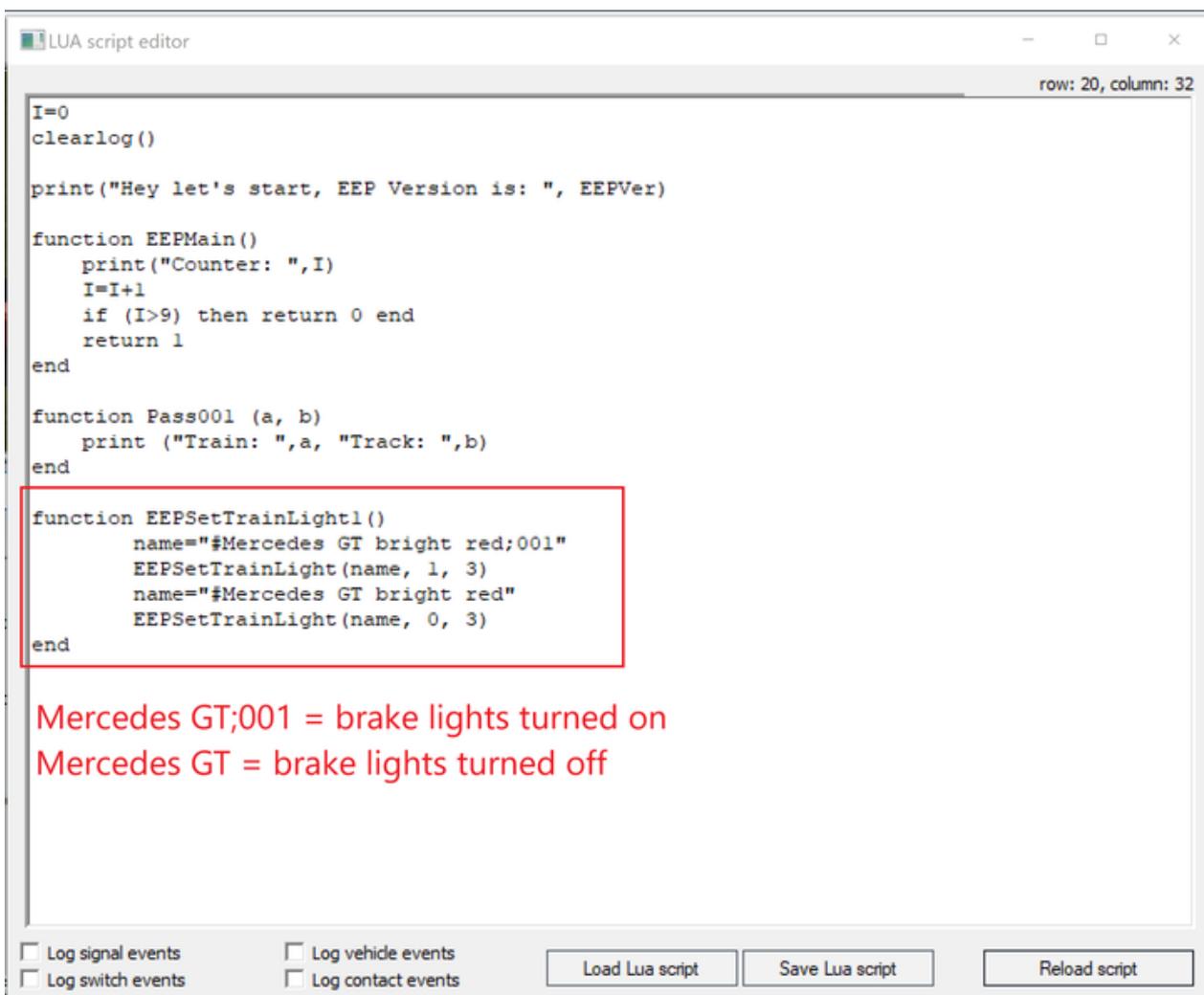
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### Lua : Contacts can prevent the brake lights from being automatically turned on

In some circumstances, the user may not wish to have the brake lights of the rolling stock on when braking. To prevent the brake lights from being activated, you can use the Lua function, which you already know `EEPSetTrainLight`, but set the last parameter of this function to 3. The second parameter is "0" to deactivate the brake lights and "1" to activate them.

Example

```
EEPSetTrainLight("#Mercedes GT bright red", 0, 3)
```



```
LUA script editor
row: 20, column: 32

I=0
clearlog()

print("Hey let's start, EEP Version is: ", EEPVer)

function EEPMain()
    print("Counter: ",I)
    I=I+1
    if (I>9) then return 0 end
    return 1
end

function Pass001 (a, b)
    print ("Train: ",a, "Track: ",b)
end

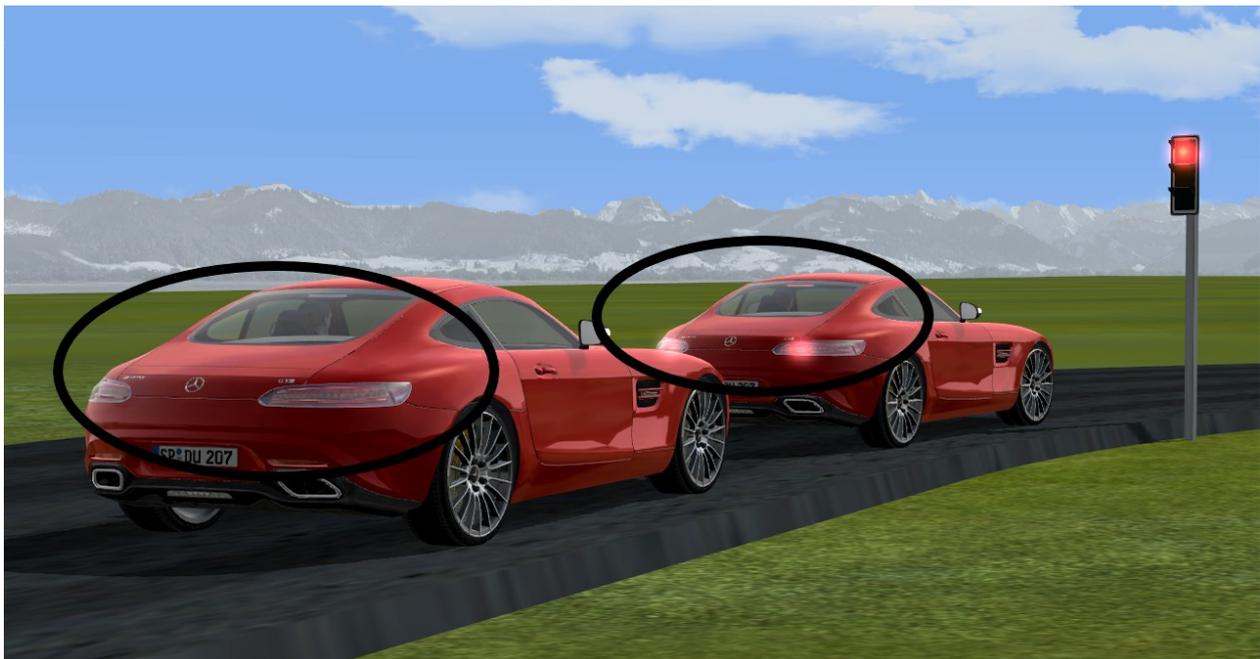
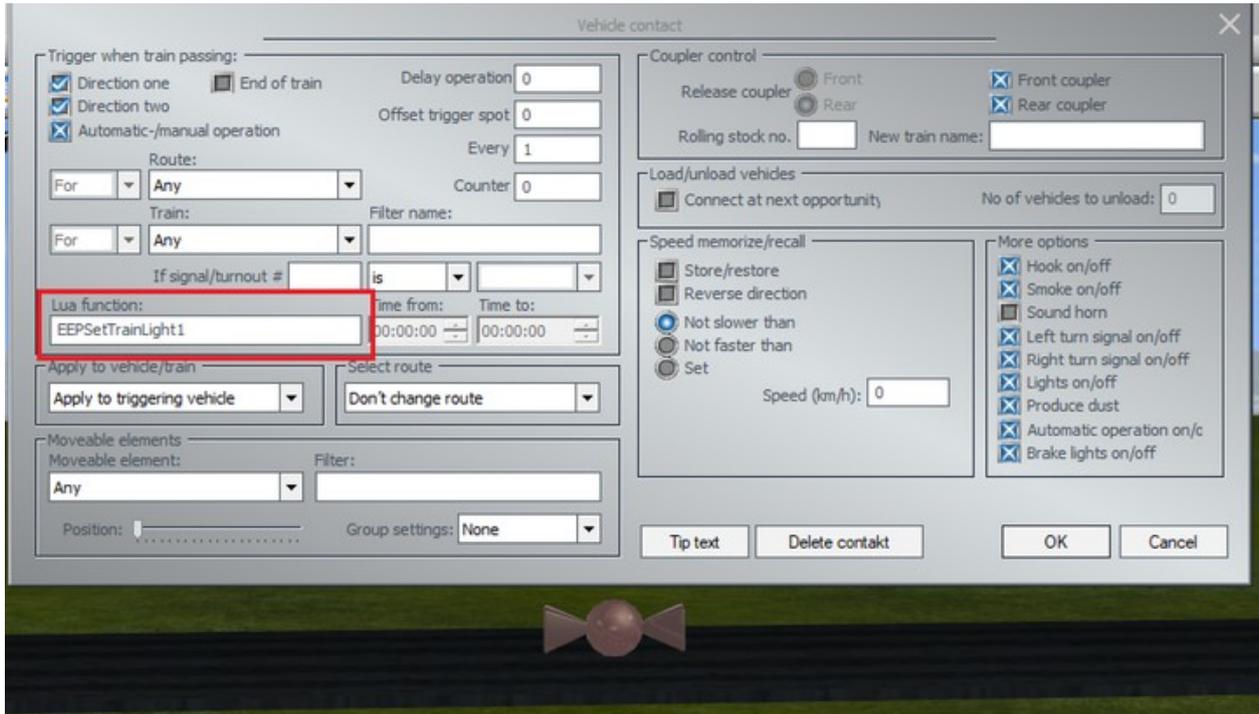
function EEPSetTrainLight1()
    name="#Mercedes GT bright red;001"
    EEPSetTrainLight(name, 1, 3)
    name="#Mercedes GT bright red"
    EEPSetTrainLight(name, 0, 3)
end

 Log signal events
 Log vehicle events
 Log switch events
 Log contact events

Load Lua script Save Lua script Reload script
```

Mercedes GT;001 = brake lights turned on  
Mercedes GT = brake lights turned off

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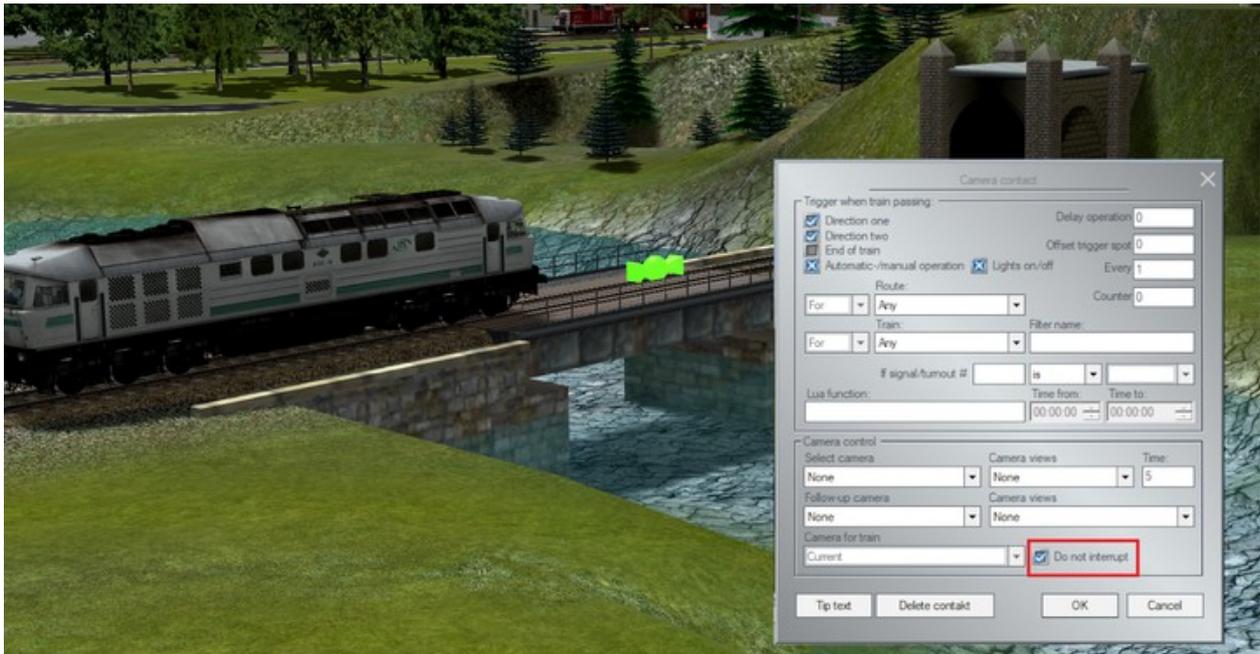


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## The switchover to another view when passing through a tunnel can be inhibited.

Previously, if the user followed a vehicle with a camera in tracking mode, a change to the cabin camera was made automatically when the vehicle entered a tunnel.

Now, using Plugin 3 of EEP 16, you can indicate in the camera contact's property menu that you do not want the camera to be interrupted. No more automatic switching of the camera to cabin view mode.



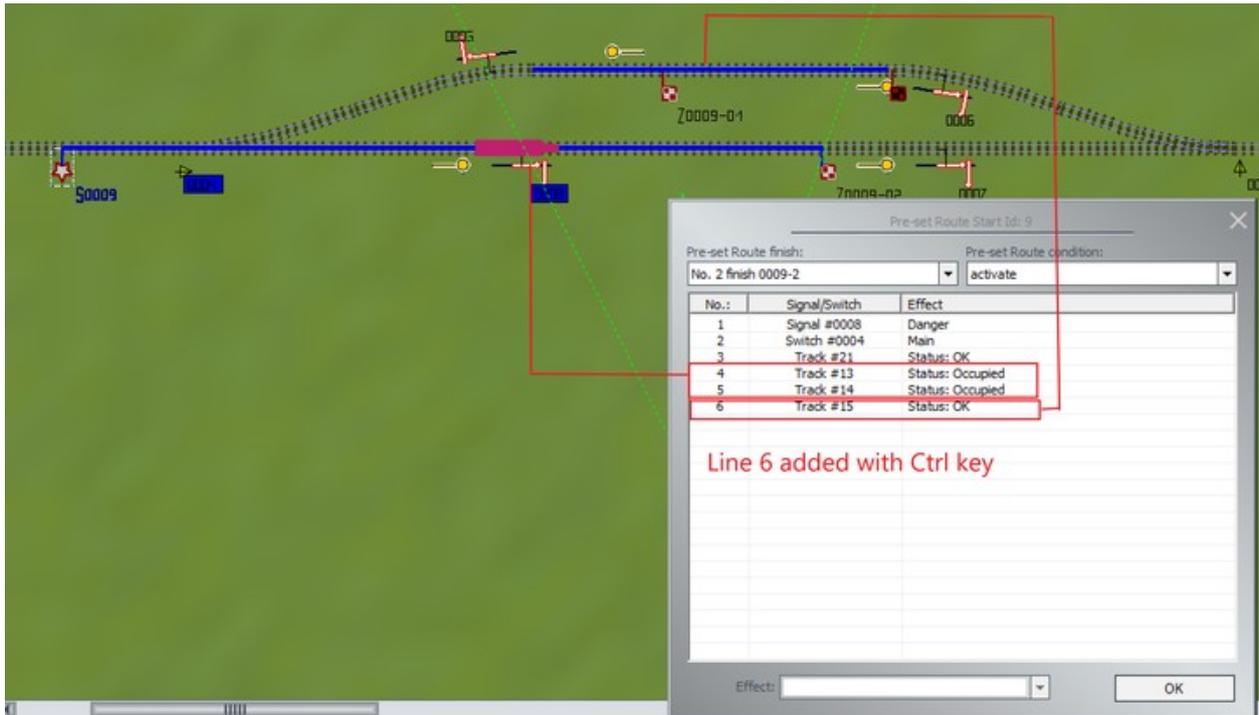
## A more detailed overview on predefined routes including occupancy verification

The list of switches and signals present on a route has been completed with the list of also used tracks. The occupancy status of these tracks are also checked for a possible collision conflict.

To display this information window, select the route (left-click on the start and end of the route) followed by a right-click, and the dialogue box will open.

The status OK means that the section is free and can be driven through. « Occupied » status prevents the track from being opened to traffic as there is currently a train on the specified section.

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The list includes not only the tracks of the selected route, but also the track sections of other routes which may use or cross over the route. These track sections which are indirectly related to the selected route may prevent the opening for traffic, which is why their occupancy status is also queried

### **Note :**

When you are editing the route, you can exclude certain track sections from the occupancy check by using the Ctrl key or add track sections to the occupancy check even if they do not affect the route.

## **Lua : function that displays the text allocated to a writable model**

With Plugin 3 of Eep 16.3 a new Lua functionality is implemented:  
**EEPRollingstockGetTextureText**

It works in a similar way to the : „EEPRollingstockSetTextureText“ function which assigns a text to a writable model but returns in this case the already saved text.

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LUA script editor row: 1, column: 1

```

I=0
clearlog()

print("Hey let's start, EEP Version is: ", EEPVer)

function EEPMain()
    print("Counter: ",I)
    I=I+1
    if (I>9) then return 0 end
    return 1
end

function EEPRollingstockSetTextureText1()
    EEPRollingstockSetTextureText("PRESS 285 101 EpVI", 1, "EEP 16.3")
end

function EEPRollingstockGetTextureText1()
    print (EEPRollingstockGetTextureText("PRESS 285 101 EpVI", 1))
end
    
```

Log signal events     Log vehicle events  
 Log switch events     Log contact events

- Name of the function to mention in the contact point
- Name of the rolling stock
- # of the writable surface
- Text to be set



TREND EEP event window

```

Hey let's start, EEP Version is: 16.3
Counter: 0
Counter: 1
Counter: 2
Counter: 3
Counter: 4
Counter: 5
Counter: 6
Counter: 7
Counter: 8
Counter: 9
trueEEP 16.3
                    
```

Vehicle contact

<p>Trigger when train passing:</p> <p><input checked="" type="checkbox"/> Direction one    <input type="checkbox"/> End of train    Delay operation: <input type="text" value="0"/></p> <p><input checked="" type="checkbox"/> Direction two    Offset trigger spot: <input type="text" value="0"/></p> <p><input checked="" type="checkbox"/> Automatic-/manual operation    Every: <input type="text" value="1"/></p> <p>Route: <input type="text" value="Any"/>    Counter: <input type="text" value="0"/></p> <p>Train: <input type="text" value="Any"/>    Filter name: <input type="text"/></p> <p>If signal/turnout # <input type="text"/> is <input type="text"/></p> <p>Lua function: <input type="text" value="EEPRollingstockGetTextureText1"/>    Time from: <input type="text" value="00:00:00"/>    Time to: <input type="text" value="00:00:00"/></p> <p>Apply to vehicle/train: <input type="text" value="Apply to triggering vehicle"/>    Select route: <input type="text" value="Don't change route"/></p> <p>Moveable elements: <input type="text" value="Any"/>    Filter: <input type="text"/></p> <p>Position: <input type="text"/>    Group settings: <input type="text" value="None"/></p>	<p>Coupler control</p> <p>Release coupler: <input type="radio"/> Front    <input checked="" type="checkbox"/> Front coupler</p> <p style="margin-left: 20px;"><input type="radio"/> Rear    <input checked="" type="checkbox"/> Rear coupler</p> <p>Rolling stock no.: <input type="text"/>    New train name: <input type="text"/></p> <p>Load/unload vehicles</p> <p><input type="checkbox"/> Connect at next opportunity    No of vehicles to unload: <input type="text" value="0"/></p> <p>Speed memorize/recall</p> <p><input type="checkbox"/> Store/restore</p> <p><input type="checkbox"/> Reverse direction</p> <p><input checked="" type="radio"/> Not slower than</p> <p><input type="radio"/> Not faster than</p> <p><input type="radio"/> Set    Speed (km/h): <input type="text" value="0"/></p> <p>More options</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Hook on/off</li> <li><input checked="" type="checkbox"/> Smoke on/off</li> <li><input type="checkbox"/> Sound horn</li> <li><input checked="" type="checkbox"/> Left turn signal on/off</li> <li><input checked="" type="checkbox"/> Right turn signal on/off</li> <li><input checked="" type="checkbox"/> Lights on/off</li> <li><input checked="" type="checkbox"/> Produce dust</li> <li><input checked="" type="checkbox"/> Automatic operation on/c</li> <li><input checked="" type="checkbox"/> Brake lights on/off</li> </ul>
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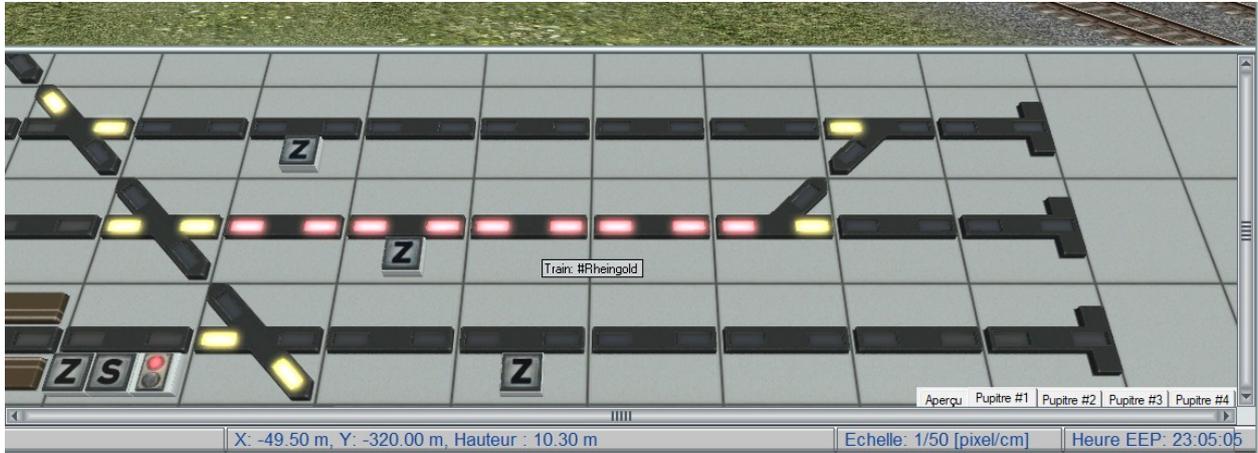
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# Manual to Plug-in 3 for EEP 16.3

## Object identification from the control desk's radar window

To facilitate the use of the control desk, information about the signals and "rolling stock" has been added. In order to display this information, simply right-click on the corresponding item and the description will appear. (Similar to the radar window in 2D mode).



## Closing remarks

With the development of Plug-in 3 for EEP 16.3 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 third plug-in for EEP 16.3.

Your Trend EEP team.