

# Manual to Plug-in 4 for EEP 16.4

Dear customers, first of all we would like to heart-fully thank you for purchasing Plug-in 4 to EEP 16.4.

---

*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.*

---

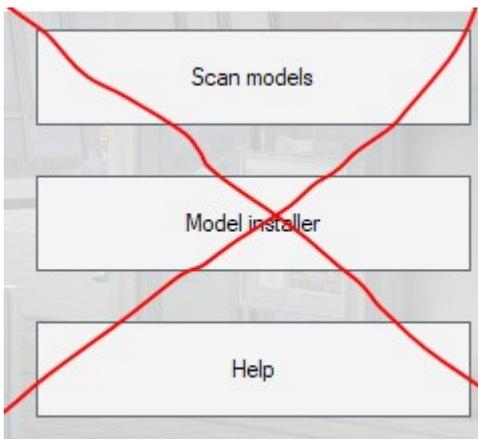
## **Glossary:**

Glossary .....	1
Installation instructions .....	2
New models .....	3
New functions : .....	4
• Construction site animation .....	4
• 3 new spline with modular appearance .....	5
• New construction machines with specific functionalities divided into 5 sets .....	8
• New type of curve .....	17
• Other new features provided with plug-in 4 .....	22
• Option to adjust the height of a track using the 3D editor .....	22
• Improvements to the Lua EEPSetPerspectiveCamera function .....	22
Closing remarks .....	23

# Manual to Plug-in 4 for EEP 16.4

## Installation instructions

Please make sure that update n°4 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.



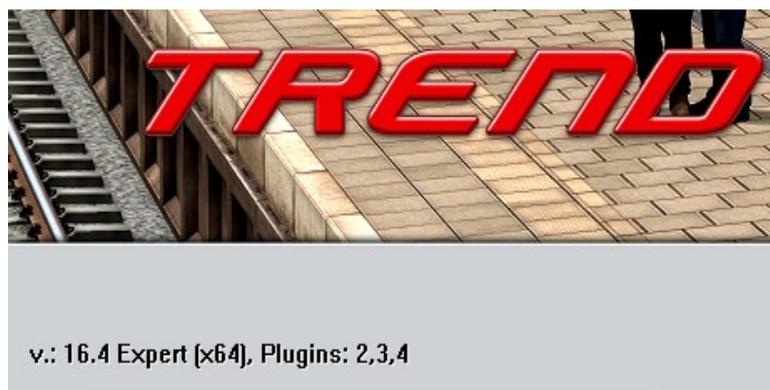
The Plug-in needs its own installer to upgrade, since it brings new features besides the new models. For this reason it is not possible to open this file directly via the "Model-Installer of EEP16.4

***If necessary, please close your EEP 16.4***

Please start installing the Plug-in by double clicking on the file **V16TSP10054**.

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 16.4

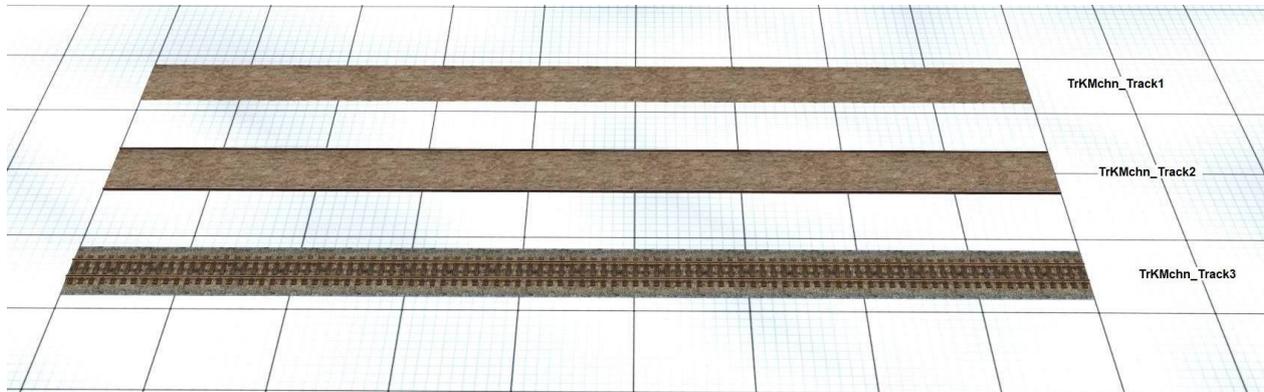
If the installation was successful, then you will see in the lower left part of the launch window the EEP 16.4 version followed by the mention Plugins 4



# Manual to Plug-in 4 for EEP 16.4

## New models contained in Plug-in 4 for EEP 16.4:

### 3 new splines for railroad track construction



### new construction machines for the animation of railroad constructions divided into 5 sets



## Manual to Plug-in 4 for EEP 16.4



### New functions :

#### Construction site animation

With the release of Plug-in 4 two new splines, one of road type, the other of track type have been added. These splines can change their appearance dynamically without your intervention. This modification, which is neither immediate nor global, is progressively applied as work is being done on the track. What is important to remember is that you don't need to do anything to modify the tracks, you just need to use the right construction machine to get the work done.

It is possible to combine sets of tracks with the appropriate machines to reproduce all the stages of a construction. Starting from a country road, lay the ballast, pass the compactor, lay the asphalt and proceed with road markings.

In order to be able to reproduce these various construction phases, it is necessary to use specific splines with different successive graphic layers (e.g. earth road, gravel road, asphalt, and finally road markings) appearing as the appropriate machinery passes by.

You have to position the requested machine on the spline and specify a travel speed. The appearance of the spline changes automatically where you are driving and you have the impression that work is being done on the track, such as laying or removing rails. This is a discontinuous animation.

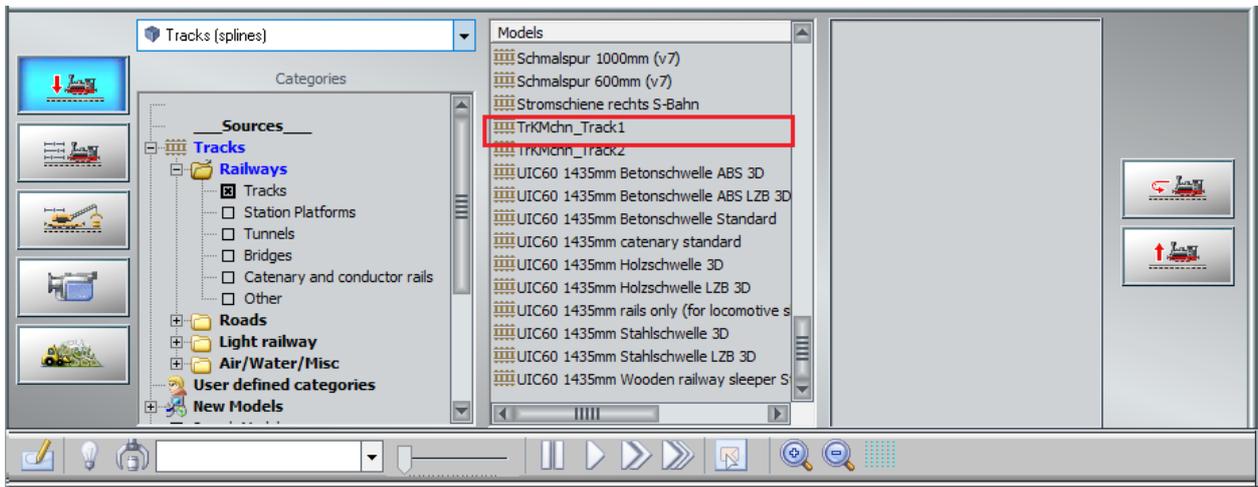
Just like road works, it is possible to animate the different stages of a railway construction site, unloading and laying of ballast, construction of rails, etc.

# Manual to Plug-in 4 for EEP 16.4

Plug-in 4 for EEP 16 contains 3 new splines and 5 sets of machines required for the animation of construction sites:

## 3 new spline with modular appearance

1/ Spline : TrKMchn\_Track1



### Preview :

The preview shows the successive "layers" that make up the spline, i.e. what the spline will look like during the different phases of the construction work :

- coating
- road with ballast
- Rail unloading
- Positioning of the sleepers
- Laying the finished rail track

Preview of the different layers composing the track



# Manual to Plug-in 4 for EEP 16.4

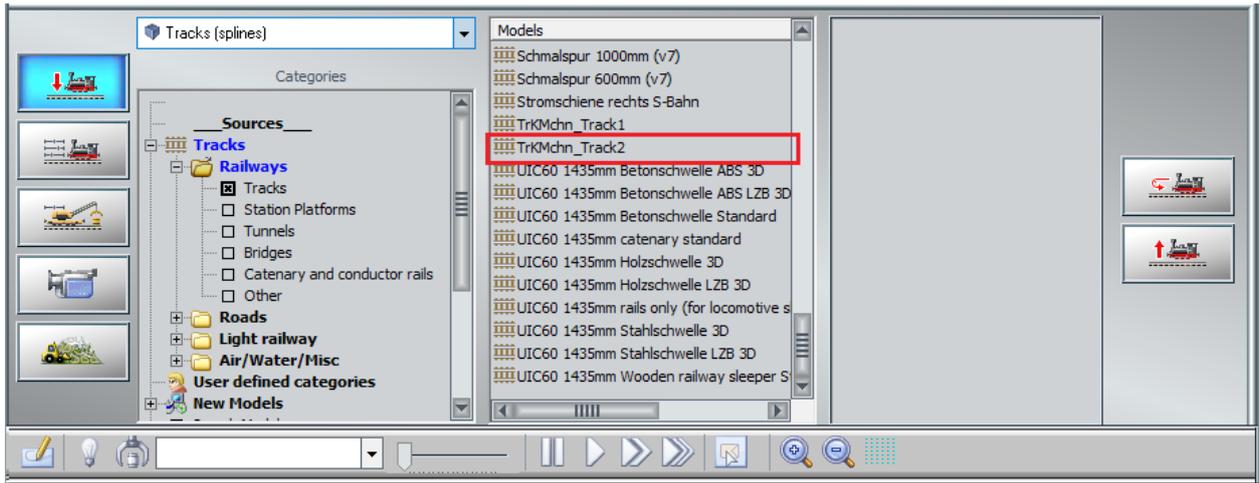
Track appearance in the 3D editor



Appearance of the track on site (before work)



2/ Spline: TrKMchn\_Track2

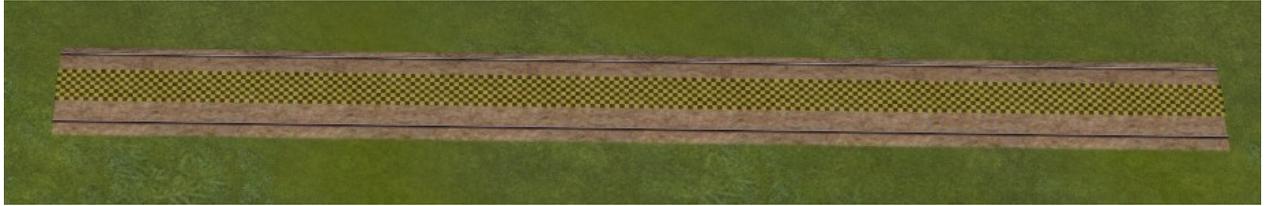


Preview of the different layers composing the track



# Manual to Plug-in 4 for EEP 16.4

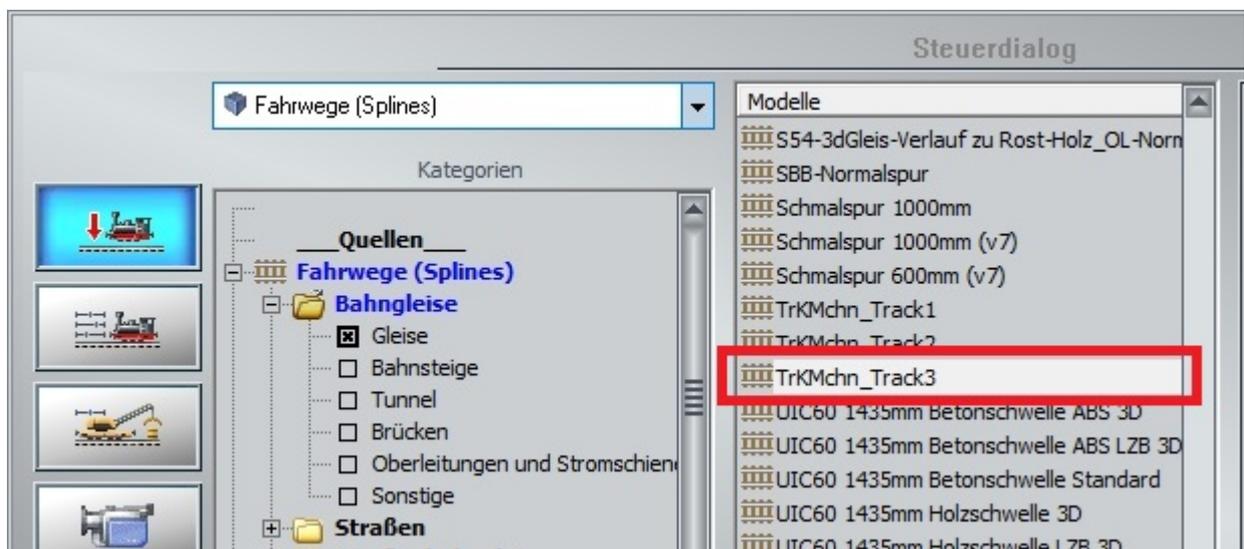
Track appearance in the 3D editor



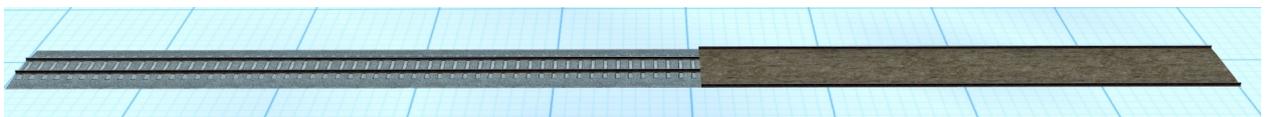
Appearance of the track on site (before work)



3/ Spline : TrKMchn\_Track3

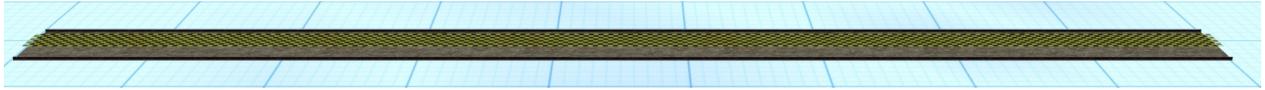


Preview of the different layers composing the track



# Manual to Plug-in 4 for EEP 16.4

Track appearance in the 3D editor



Appearance of the track on site (before work)



**New construction machines for the animation of railway worksites divided into 5 sets**

**Set n°1 :**

DAF-XF 480SC yellow tipper DU1 and



## Manual to Plug-in 4 for EEP 16.4

Bulldozer Volvo L220H

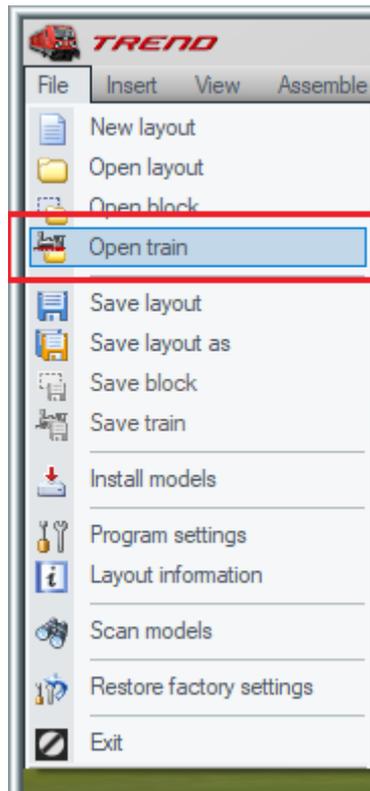


These two machines make up the unit that operates on the TrKMchn\_Track1 spline.



As you can see, ballast is discharged and then leveled on the track.

# Manual to Plug-in 4 for EEP 16.4



In order to ease the use of these two machines, they are saved as a train set.

- Gleisbau1\_Schotter.rss
- Gleisbau2\_Schienen.rss
- Gleisbau3\_SUZ500.rss

You can therefore open the train set **Gleisbau1\_Schotter.rss** and position both of them on the spline.

**Set n°2 :**

The transporter SVM98 and



## Manual to Plug-in 4 for EEP 16.4

SVM98 rail laying machine



These two machines work together to unload and deposit the rails alongside the embankments in order to prepare the site for the next machine.

This set can also be loaded as a train set : **Gleisbau2\_Schienen.rss**.

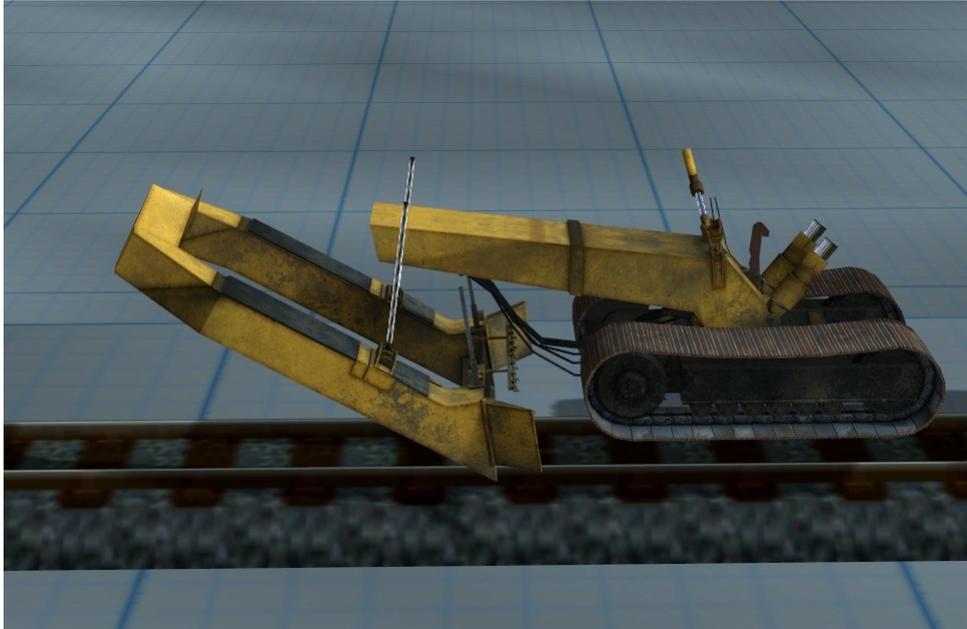


**Set n°3 :**  
**Continuous action track renewal machine**  
The SUZ 500 part 1



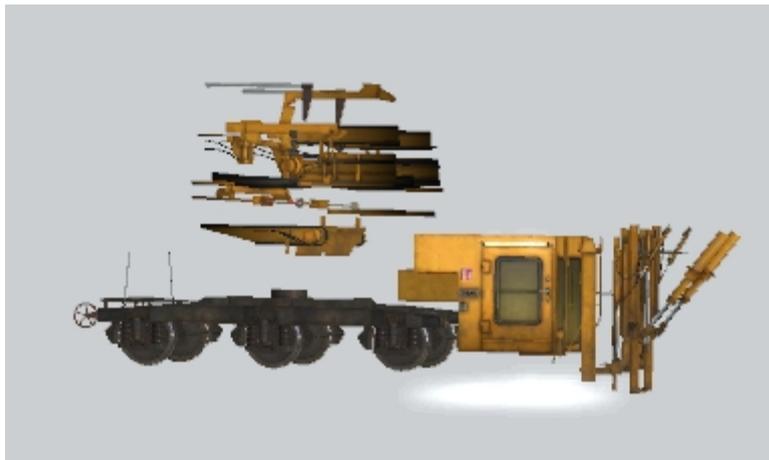
# Manual to Plug-in 4 for EEP 16.4

The SUZ 500 part 2



with work sound: diesel engine

The SUZ 500 part 3



The SUZ 500 part 4



## Manual to Plug-in 4 for EEP 16.4

This package includes the four parts of the SUZ 500 continuous feeding machine for sleeper laying including ballast management and rail laying.

The 4 parts of the SUZ 500 can be loaded using the file **Gleisbau3\_SUZ500.rss**



If the track is to be electrified, then the catenary appears above the rail as soon as the rail has been completely passed by the machine. Such a track is then completely operational.

The **TrKMchn\_Track2** rail is designed for the sets **Gleisbau1\_Schotter.rss** and **Gleisbau3\_SUZ500.rss**.

The machines perform the same work with the only difference that the track is already equipped with rails along the embankment. For this type of track, only two sets are needed to do the work, i.e. the set for ballast placement and the second set for laying the sleepers and rails. Here too, the electrification is done as soon as the machine has left the rail on which it was working.

The **TrKMchn\_Track3** rail is designed for the sets **GleisbauUmbau1\_SUZ500.rss** and **GleisUmbau2\_Schienen.rss**.

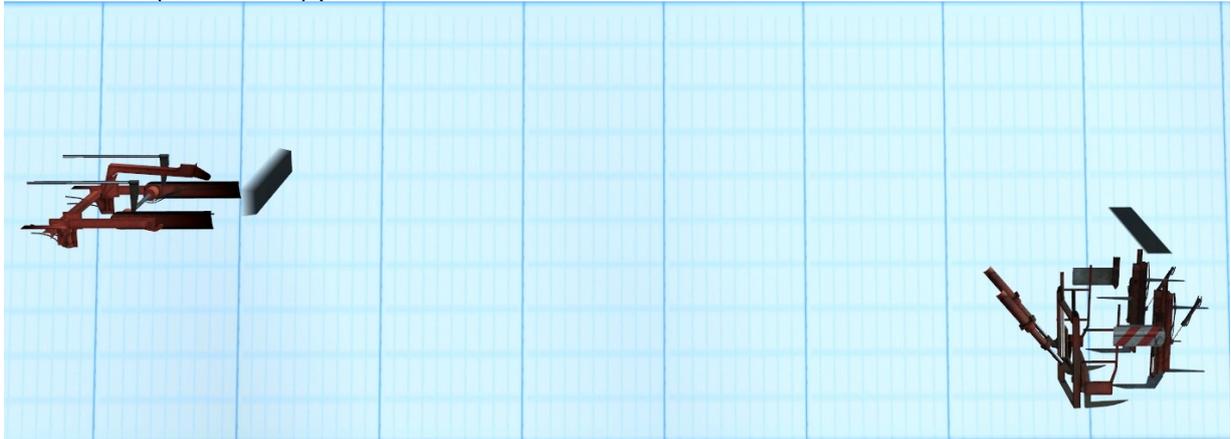
### Set n°4 :

The SUZ 500 (renovation) part 1



# Manual to Plug-in 4 for EEP 16.4

The SUZ 500 (renovation) part 2



The SUZ 500 (renovation) part 3



with work sound: diesel engine

The SUZ 500 (renovation) part 4



# Manual to Plug-in 4 for EEP 16.4

The SUZ 500 (renovation) part 5

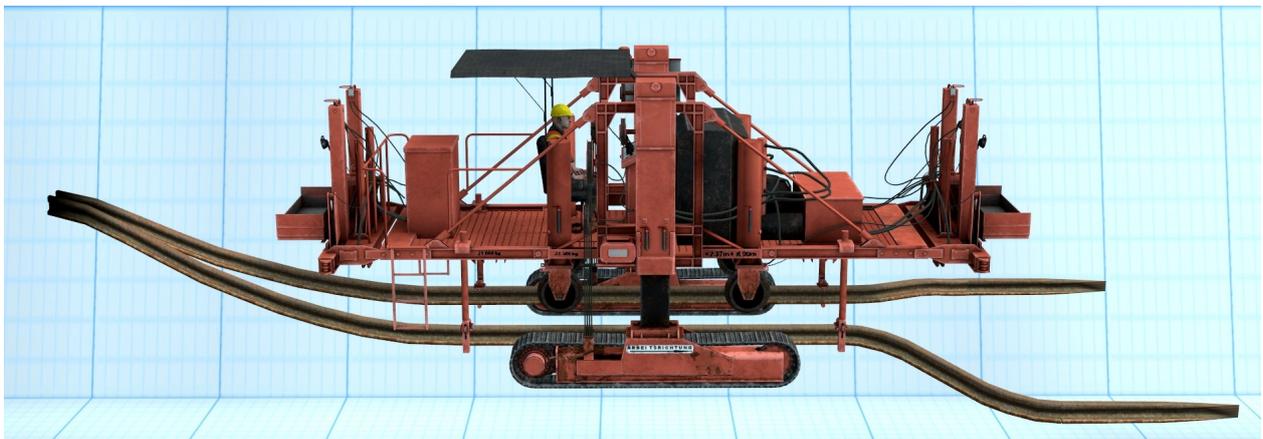


With this set, the old rails and sleepers are first removed and then the new sleepers are laid. The old rails are left alongside the railway.

This set can be loaded using the file : **GleisUmbau1\_SUZ500.rss**

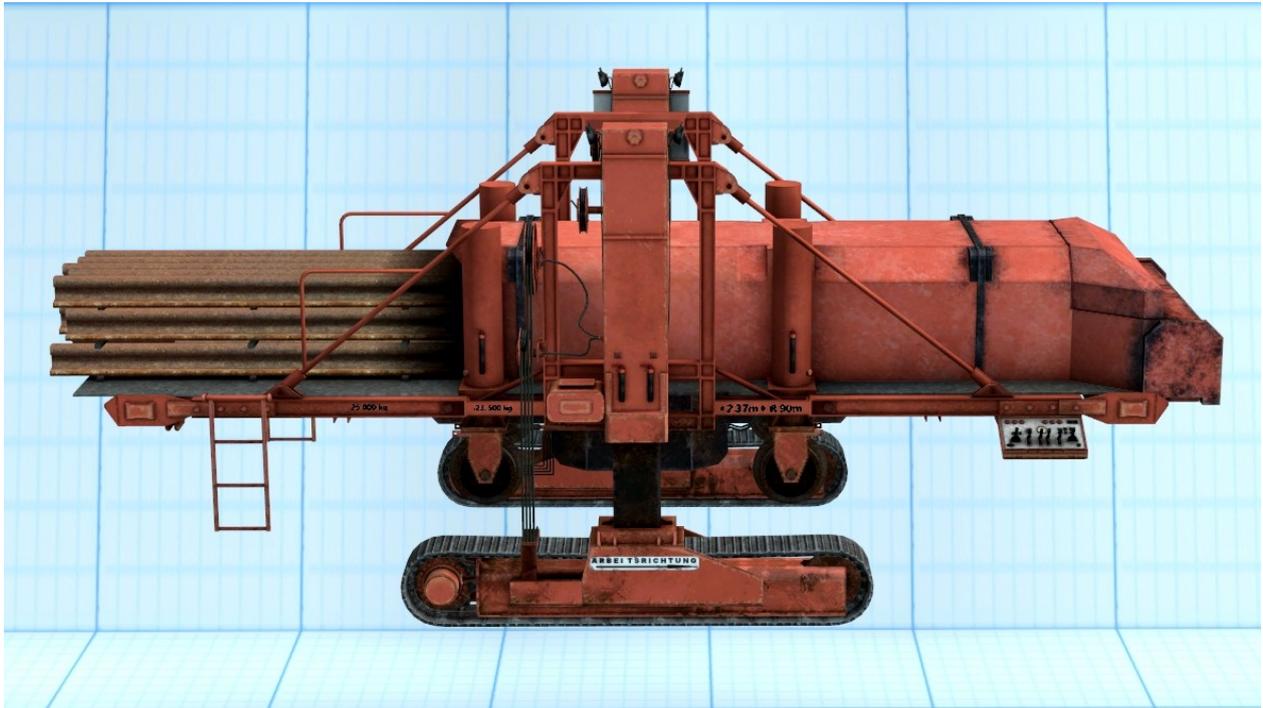
**Set n°5 :**

SVM98 rail laying machine (renovation) and



## Manual to Plug-in 4 for EEP 16.4

the transporter SVM98



These two machines are part of a set and are used to collect the old rails laid alongside the tracks during track renewal.

**Note:** All machines have a slider to activate work sounds either manually, using the mouse or a Lua command.

The sound file can be activated on part 2 of the continuous action track laying machine SUZ 500 (yellow) and on part 3 on the SUZ 500 for track renewal (the red one).

# Manual to Plug-in 4 for EEP 16.4

## New type of curve

Id: 1, !V7 Holz alt Schot C LW1

Curve type: Spline

Start position

Pos. X: -22.742

Pos. Y: -1.002

Abs. H.: 0.600

Rel. H.: 0.600

Roll(°): 0.000

Pitch(°): 0.000

Yaw(°): 26.000

Characteristic

Target Position + Target-Angle YZ + Overshoot(m)

Scale: 1.000

X Offset: 60.000

Angle Y: 0.000

Angle Z: 0.000

Y Offset: -0.000

Z Offset: 0.000

Overshoot start: 60.000

Overshoot end: 60.000

Tilt

Start: 0.000

End: 0.000

More settings

Electric

Track-Object on begin

Track-Object on end

Properties of the zigzag course of the catenary

Track start (0 cm)

Track end (0 cm)

show switch lantern

Enable switch sound.

Hidden

Lantern right

Lantern left

Automatic

List of associated contacts

Setting

Show position

Connection to switch/signal: 0

If set to 'main', then:

If set to 'branch', then:

After passing over: No change

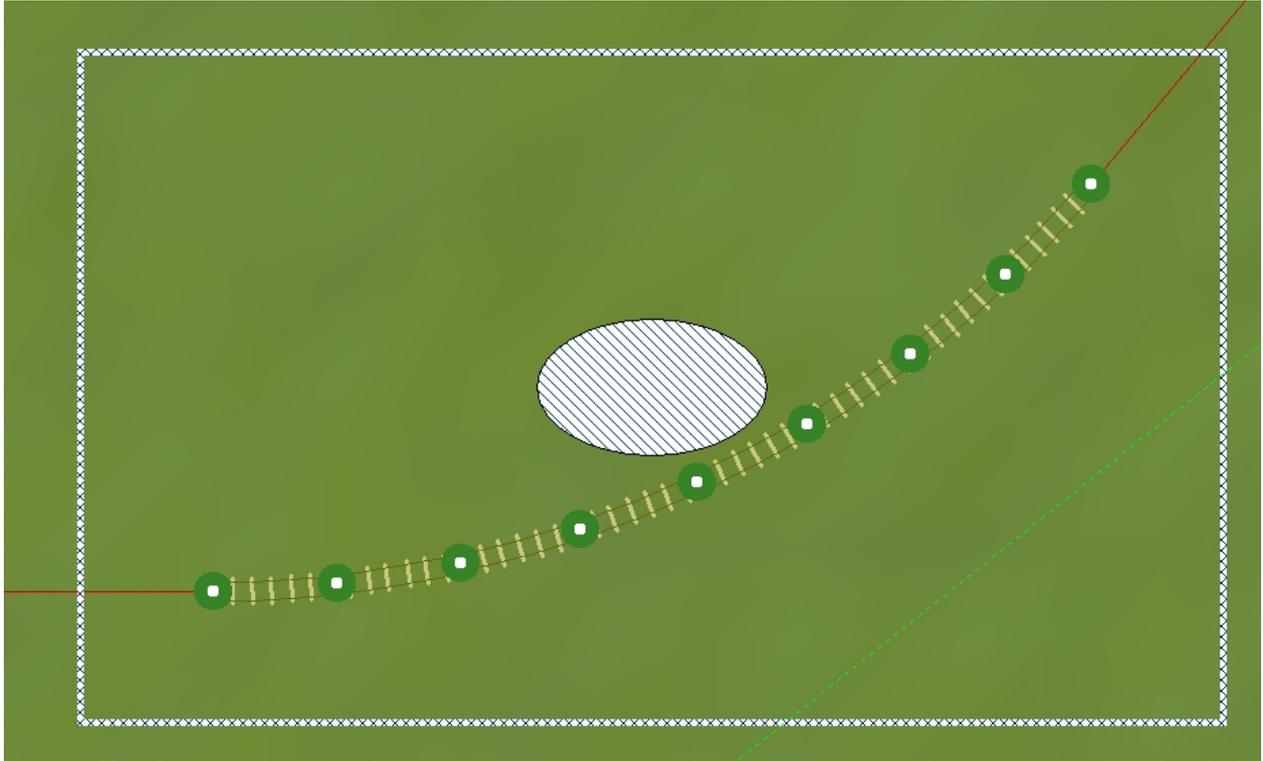
Tip text

Inscriptions

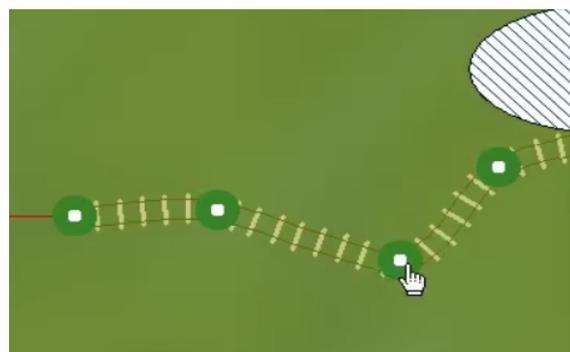
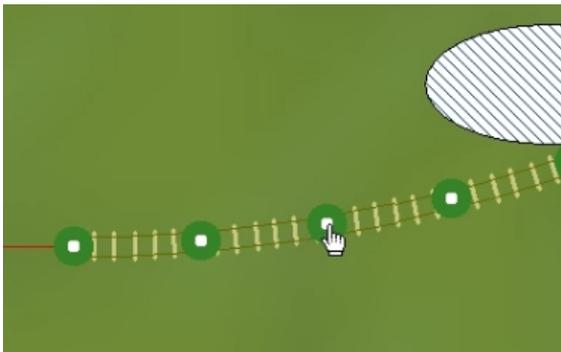
OK

This type of track differs from the others for having control points (nodes) whose positioning can be modified in order to adapt the track to your needs. After selecting this spline and placing it on the plan, a track with additional nodes materialized by green circles appears in the 2D editor.

## Manual to Plug-in 4 for EEP 16.4



These nodes can be moved. The mouse cursor changes when you hover over a node.

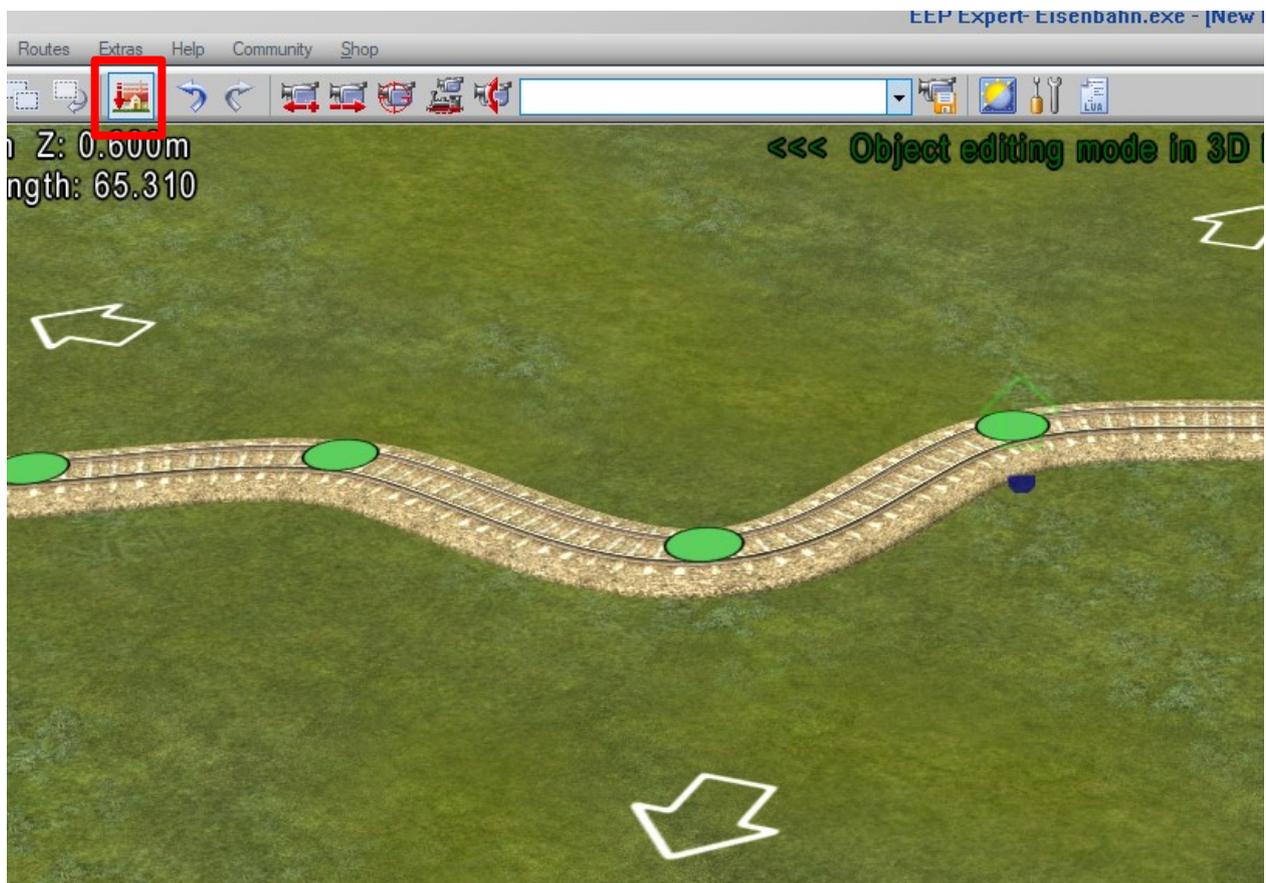
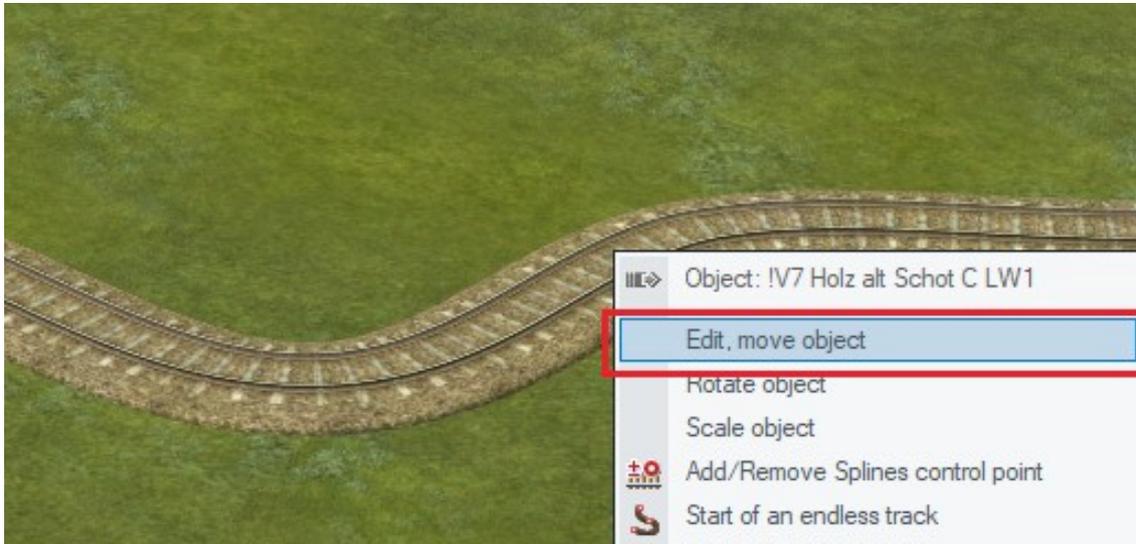


## Manual to Plug-in 4 for EEP 16.4

In 3D editor mode you have to make the contextual menu appear by right-clicking on this track.

Then select the option “Edit, move object”

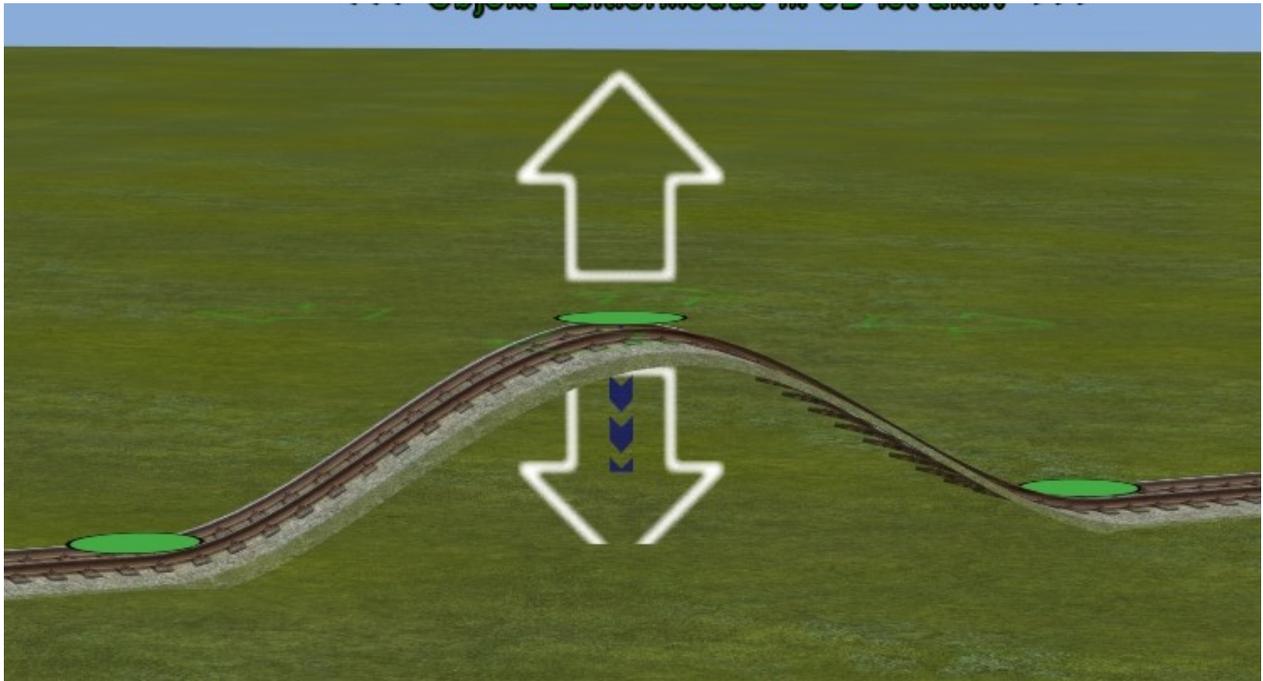
The modification of the track layout is then done in an analogous way to the 2D editing mode.



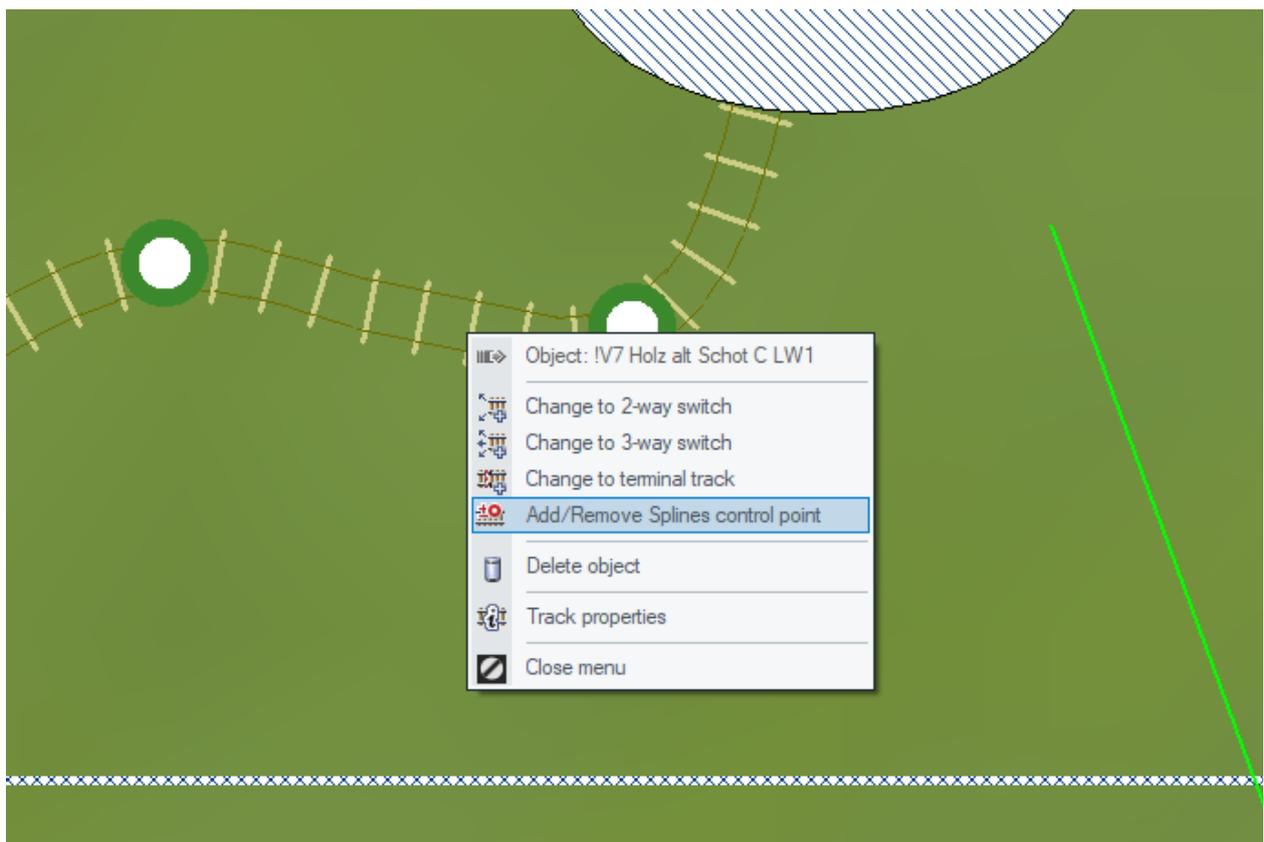
The nodes are on the surface when this mode is active.

## Manual to Plug-in 4 for EEP 16.4

If the Ctrl key is held down it is then possible to modify the selected node in its height.

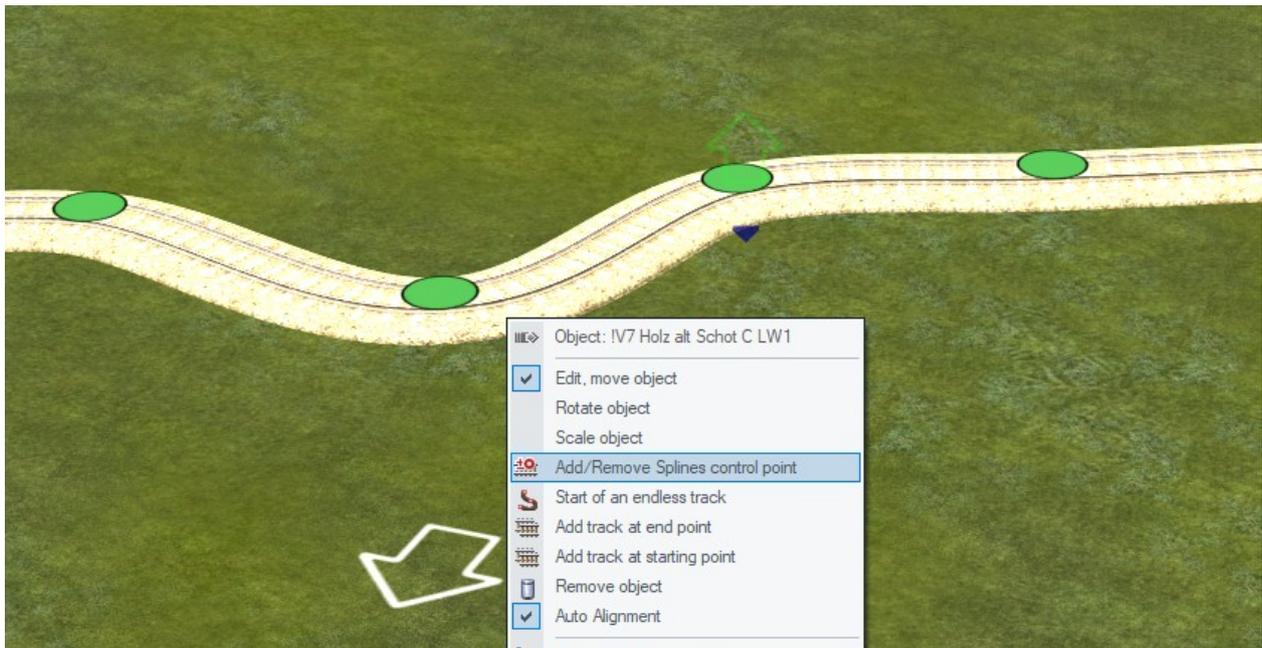


It is also possible to add or remove nodes so that you can model your track:  
In 2D mode



# Manual to Plug-in 4 for EEP 16.4

In 3D mode



In both modes by bringing up the contextual menu with a right mouse click.

Thanks to this new spline, you can also model bridges



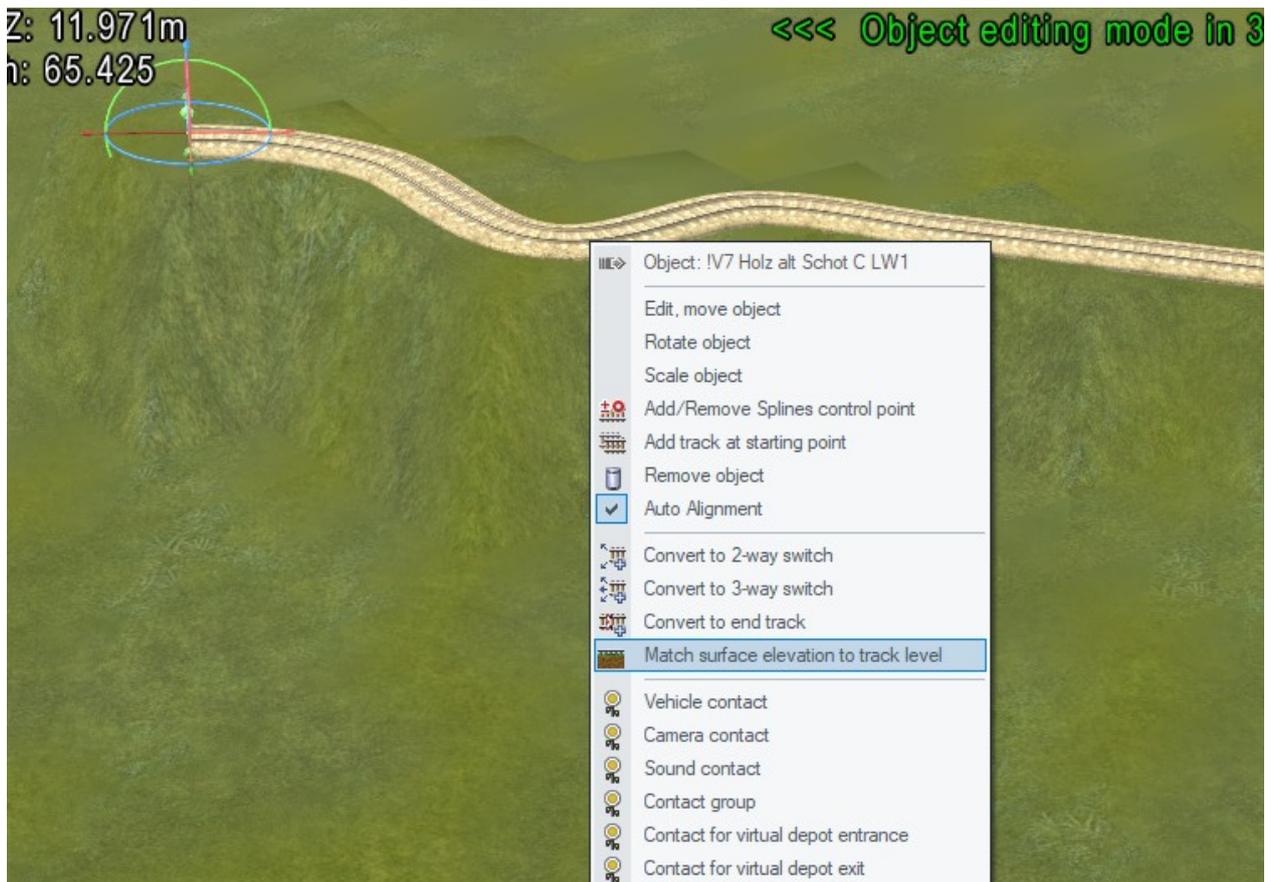
# Manual to Plug-in 4 for EEP 16.4

## Other new features provided with plug-in 4

### Option to adjust the height of a plot in the 3D editor

In edit mode, you just have to click on the chosen track, bring up the contextual menu (right mouse click) and select the option "Match surface elevation to track level".

The operation is identical to the one in the 2D editing mode but you can modify more precisely in the 3D editing mode.



### Improvement of the Lua EEPSetPerspectiveCamera function

The existing Lua function EEPSetPerspectiveCamera now offers the possibility to enter a perspective with the value 10 which includes or sets the perspective from the driver's cab (e.g. the 0 key).

# Manual to Plug-in 4 for EEP 16.4

## Closing remarks

With the development of Plug-in 4 for EEP 16.4 many wishes of 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 16.4

Your Trend EEP team.