AnyRail 6 Manual English

Table of Contents

1 Getting Started

We've designed AnyRail™ to be as straightforward as possible. You can start experimenting with layouts as soon as you've installed the software. However, it's probably a good idea to read through this Getting Started guide.

1.1 Setting up

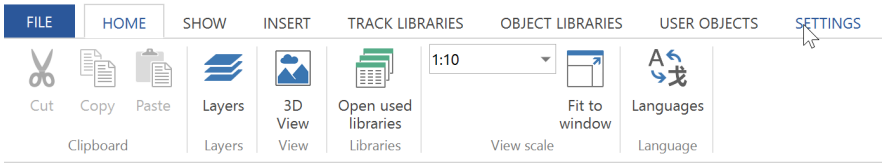
The **SETTINGS** tab enables you to set up AnyRail to suit your way of working. There's a full description starting here 99. Most of the default settings should be OK for now. However, you probably want to choose a measurement system and specify a work area right away.

1.1.1 Choosing a measurement system

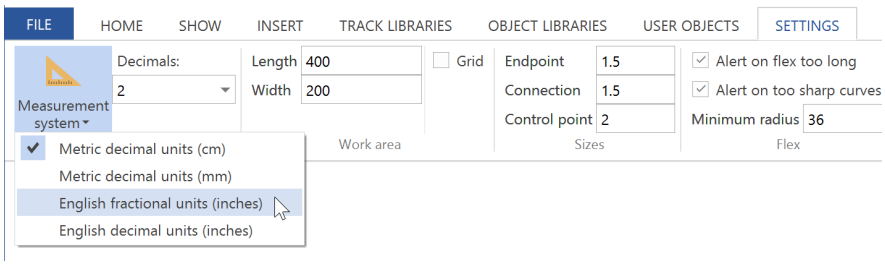
By default, all measurements are metric. However, you can change this.

To specify a measurement system

1. Click the **SETTINGS** tab:



1. Click **Measurement system**:



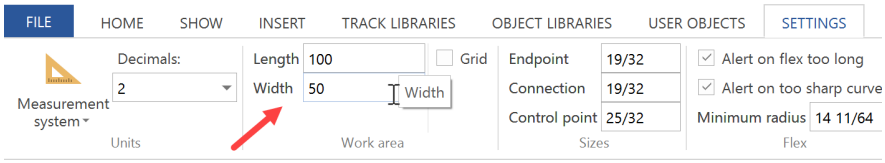
If you select **English fractional units**, AnyRail shows all measurements using fractions, e.g. 20 ¾.
If you select **English decimal units**, the same value appears as 20.75.
AnyRail accepts measurements in both formats, and rounds fractions to the nearest 1/64 of an inch.

1.1.2 Specifying a work area size

In AnyRail, you can set the outer limits of your work area.

To specify a work area size

1. Click the **SETTINGS** tab.
2. Find the **Work Area** group:



3. Enter a **Length** and **Width**.

TIP: To draw the table for your layout, draw a surface 59

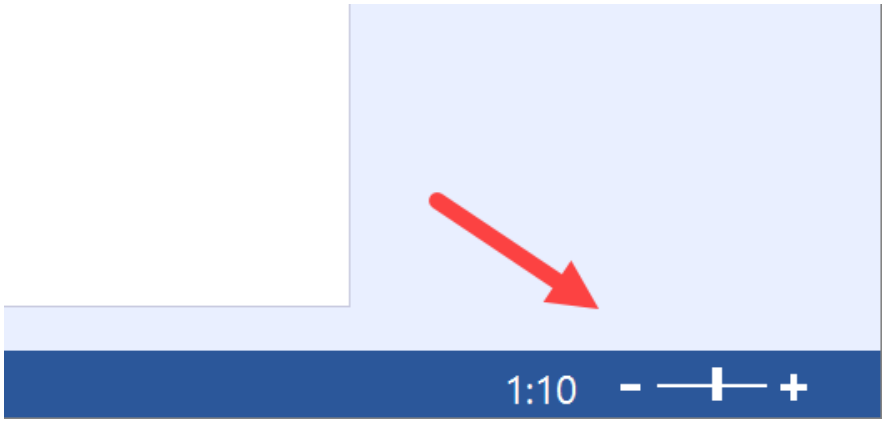
1.1.3 View drawing scale

This is roughly the scale at which things are displayed on screen. This is not to be confused with your modeling scale.

Don't rely on this for precise measurements, as the actual sizes depend on the size of your monitor.

To zoom in or zoom out

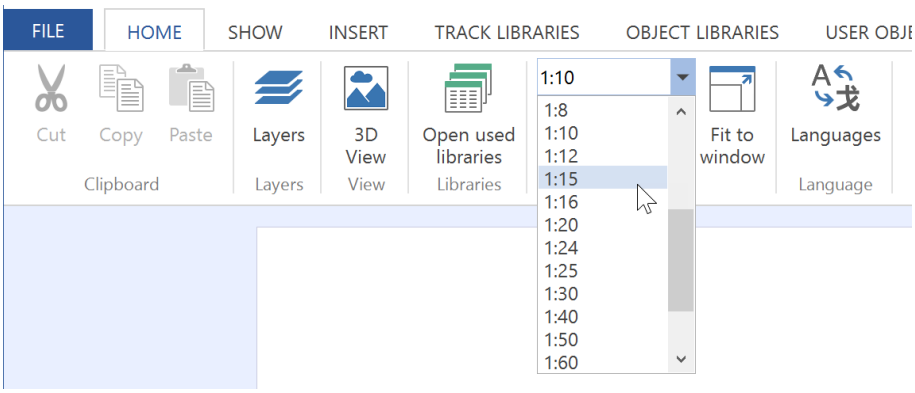
1. Locate the View Scale slider in the lower right corner:



2. Move the Slider to change the view scale.

Or:

1. Click the **HOME** tab.



2. Select a View Scale.

TIP: For fast zoom, press CTRL and use the mouse wheel

TIP: To zoom using the keyboard, press CTRL + or CTRL -

NOTE: This setting has nothing to do with the train scale i.e.: TT, O, H0, etc. The train scale depends on which track library you use

1.2 Track Libraries

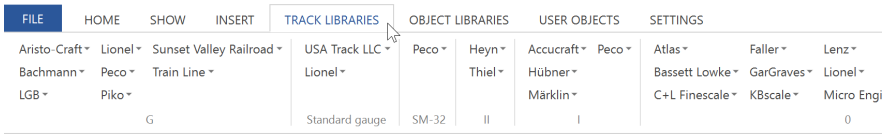
The first thing you need is some track!

AnyRail keeps track in libraries, and has one for all the well-known manufacturers, including Atlas, Märklin, Roco, Peco, and many others. Each piece of track matches the original as closely as possible - some of them were even created using the manufacturer's original CAD files.

1.2.1 Opening a Track Library

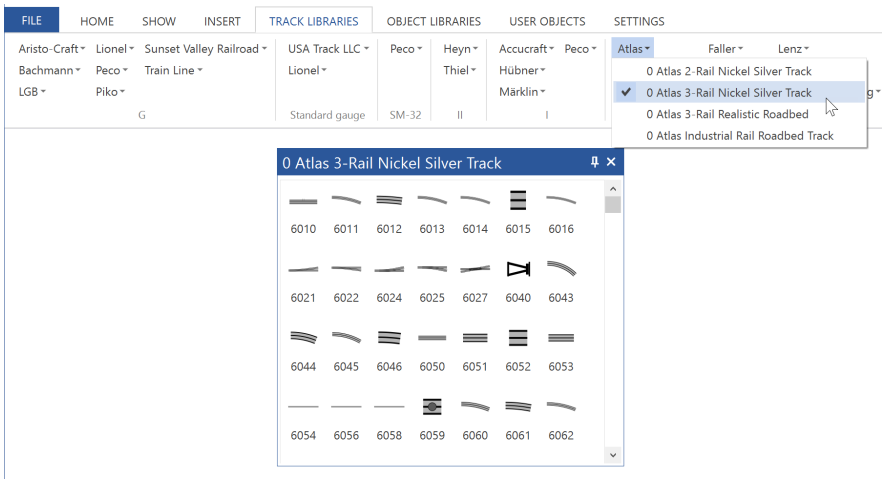
To open a Track Library

1. Click the **TRACK LIBRARIES** tab:



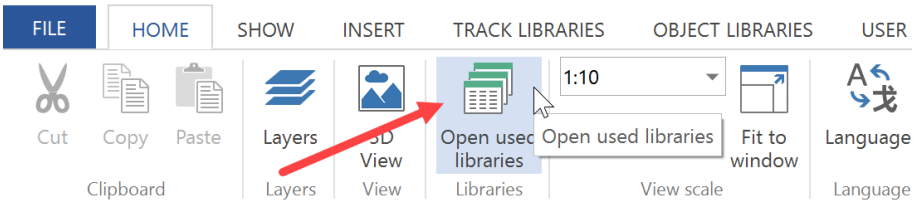
You'll see a group for each scale.

2. Click the name of the manufacturer to open the list of track libraries.
3. Select a track library:



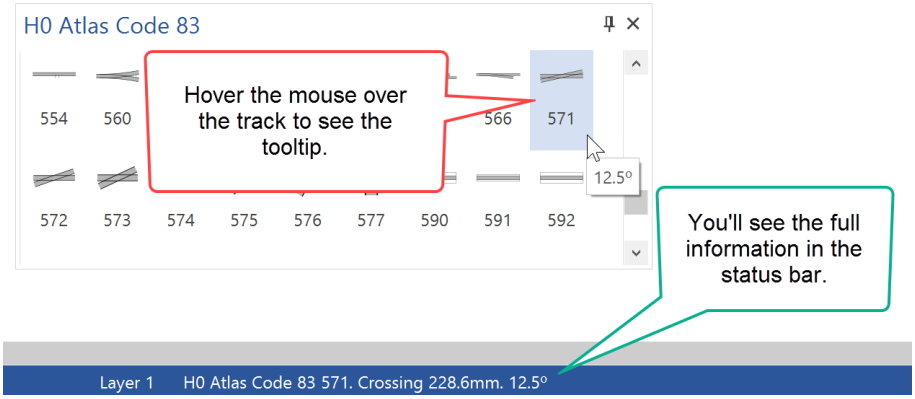
You can have as many libraries open as you want. Don't worry, AnyRail won't link incompatible track pieces – unless you tell it to (see The AnyRail SETTINGS Tab 129).

TIP: To open all the libraries used in a plan at once, click **Open used libraries** on the **HOME** tab



1.2.2 Browsing a Track Library

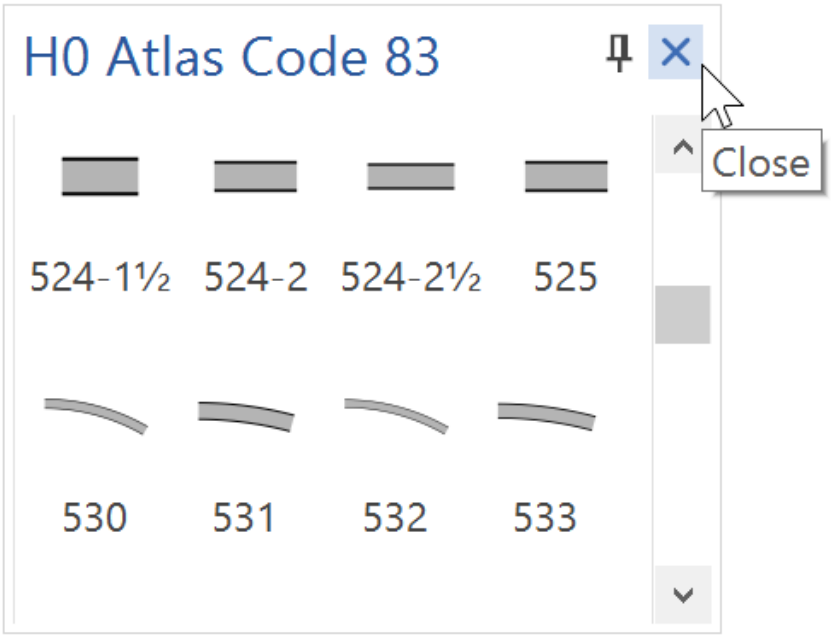
The status bar at the bottom of the screen shows detailed information about the track.



1.2.3 Closing a Track Library

To close a Track Library

- Click the little cross in the right upper corner of the track window:



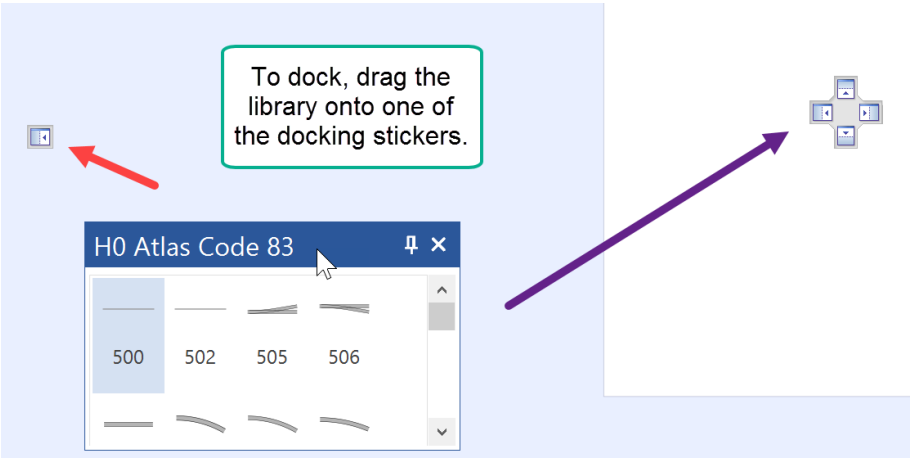
NOTE: You can also close a library the same way you opened 8 it

1.3 Docking and undocking a Library window

Drag the Library window around like any other window. You can also

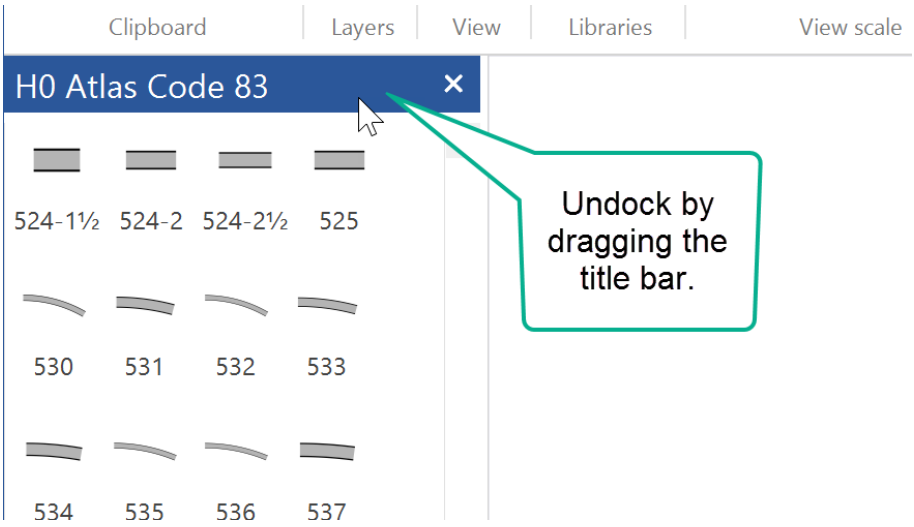
"dock" it. This means that it will stop floating and stick to the edge of the main window.

To dock a Library window

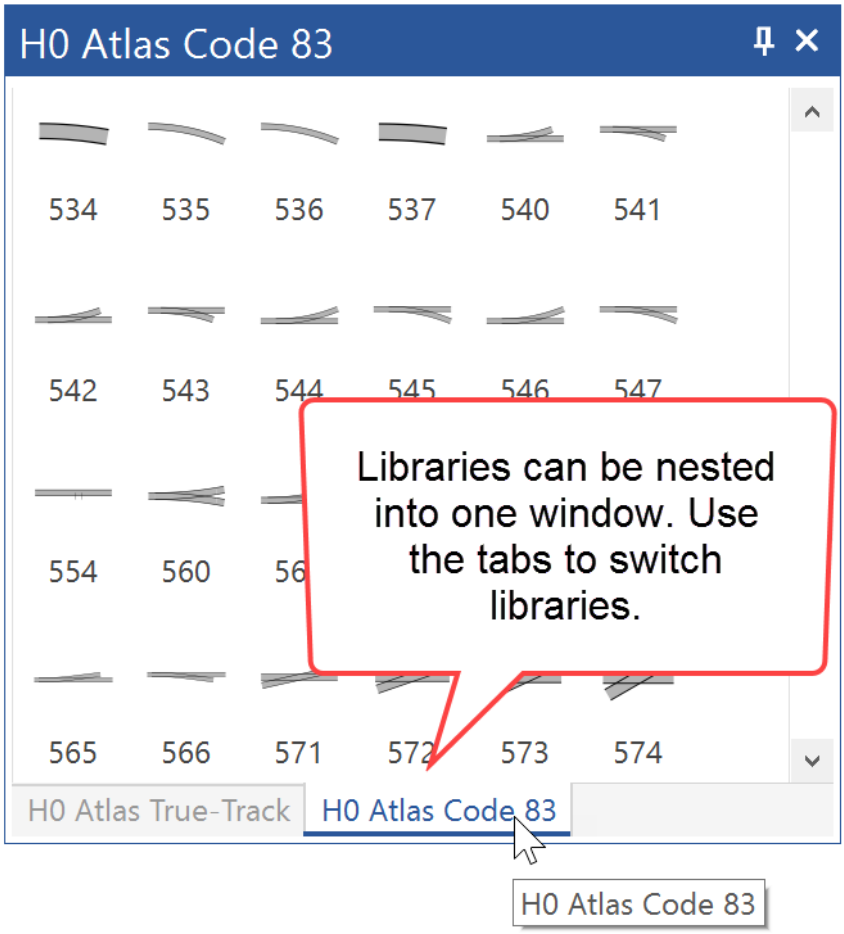


TIP: To avoid docking, hold down CTRL while you move the library

To undock a Library window



Nesting libraries



TIP: To un-nest a library, drag it away by its tab

1.4 Working with track

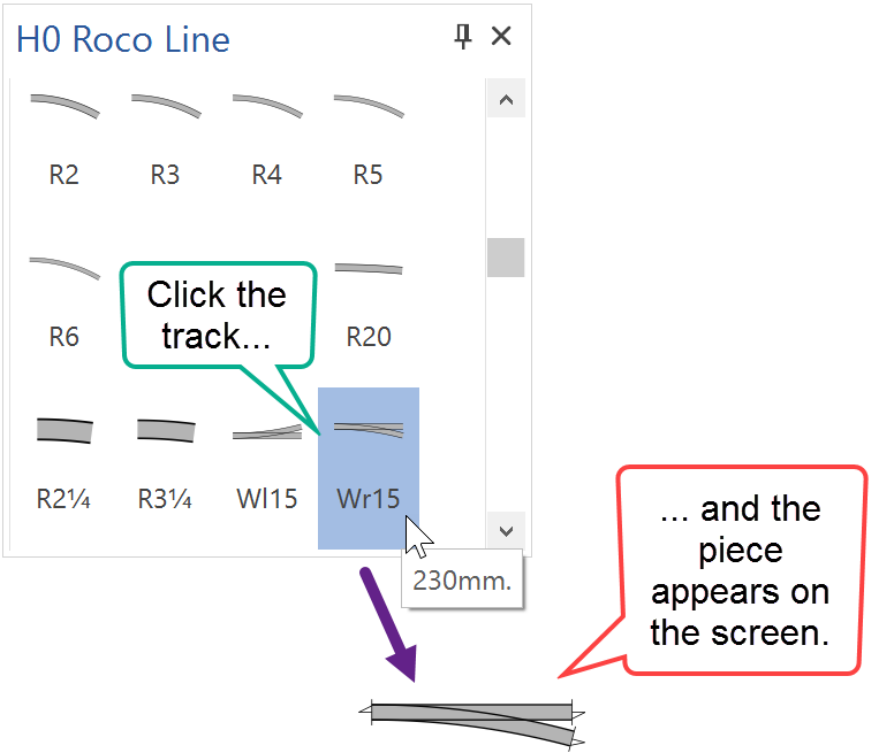
AnyRail is designed to make working with track quick and easy.

1.4.1 Adding track

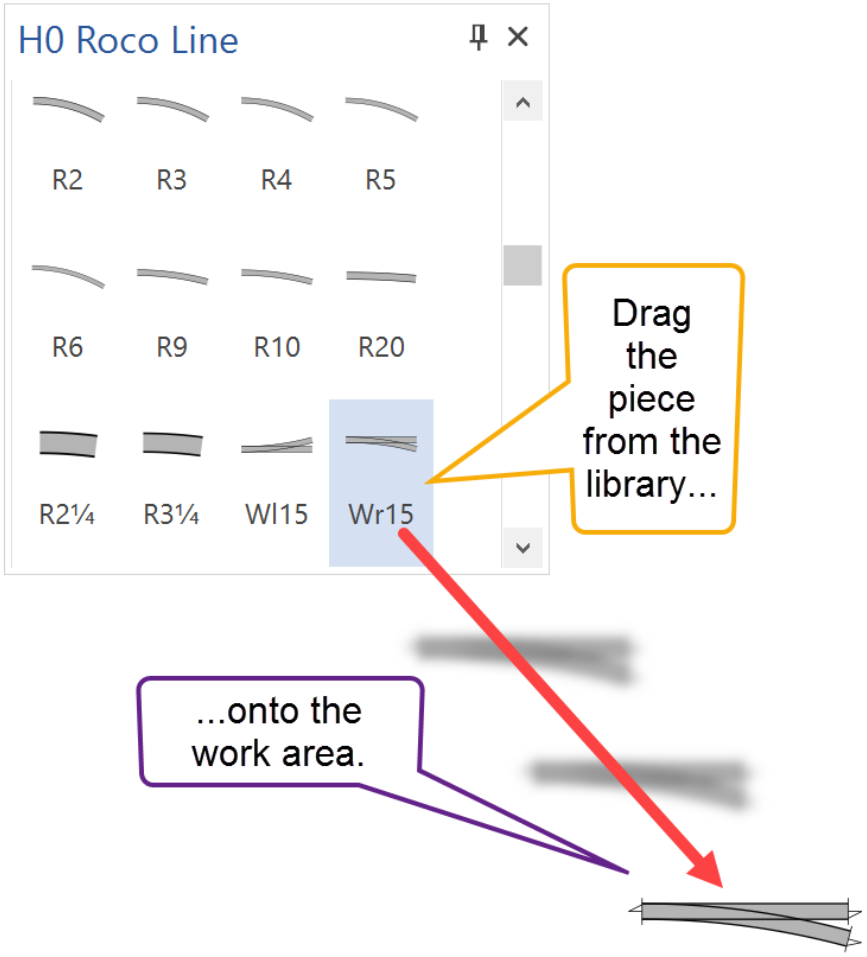
To add a track Piece

There are three methods for adding new track:

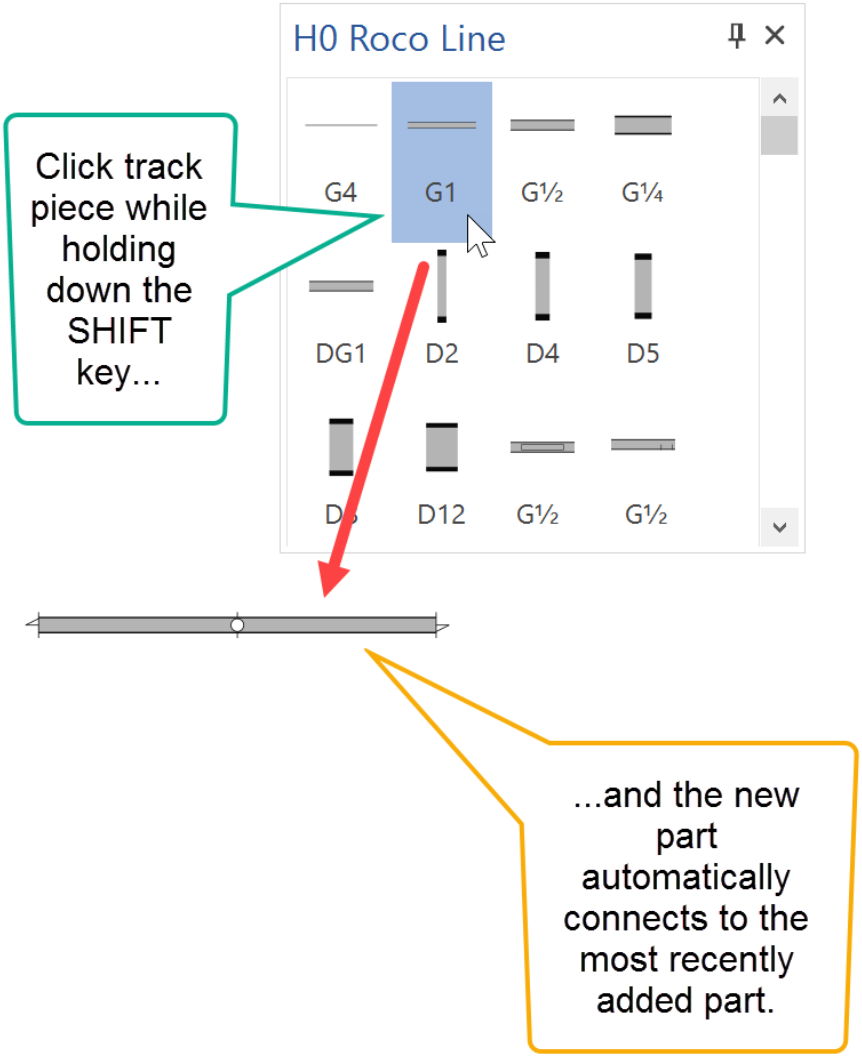
Method 1: Click



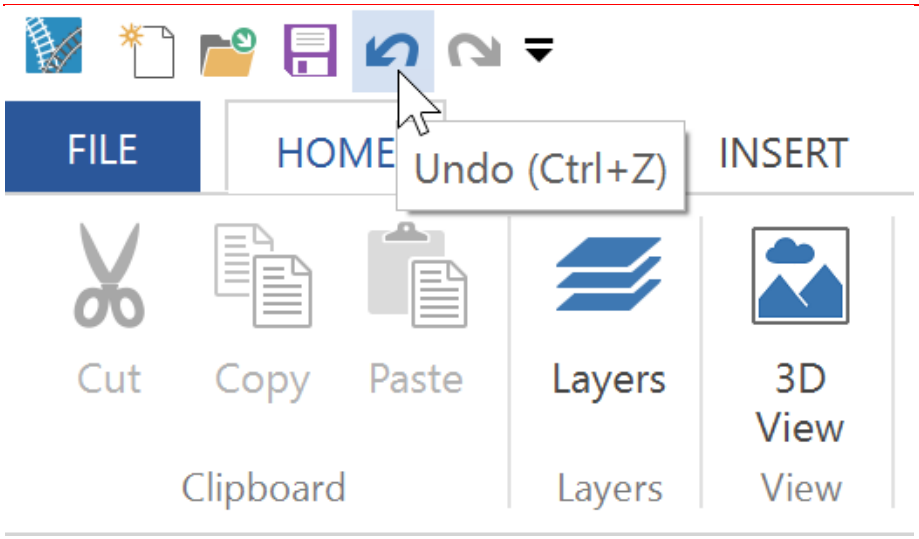
Method 2: Drag and drop



Method 3: Shift-click to connect to the most recently added component

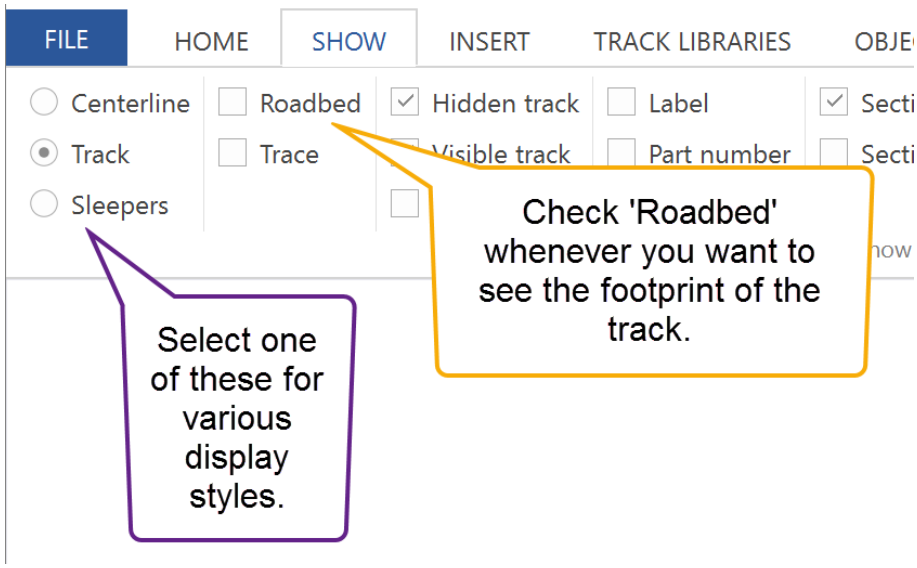


TIP: To undo the most recent action, click the Undo button, or press Ctrl-Z

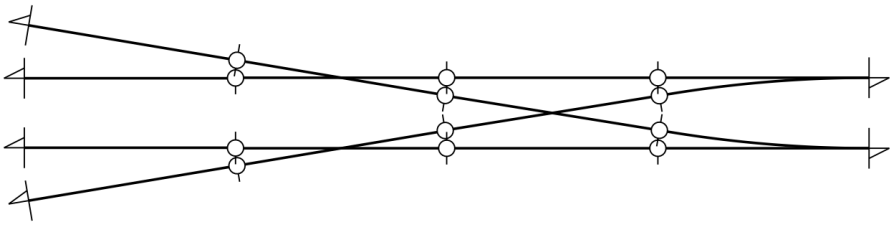


1.4.2 Track appearance

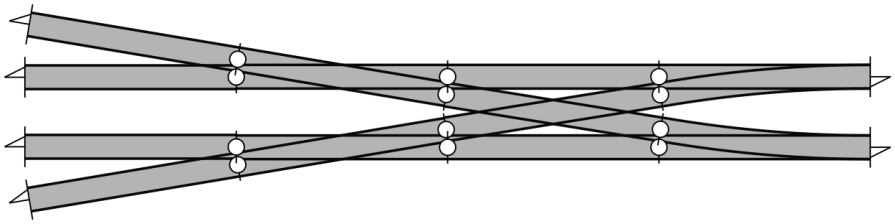
A few general settings control how track appears on your screen. You can find these in the Ribbon **SHOW** tab:



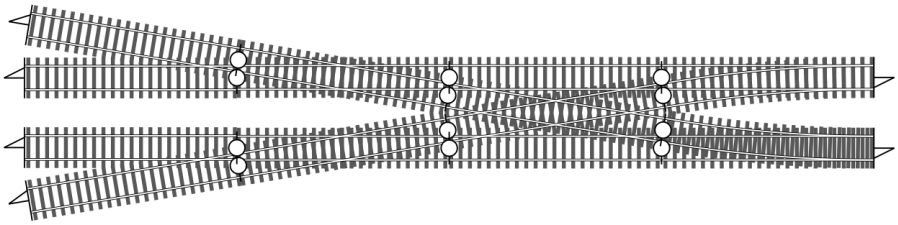
Example 1: Centerline



Example 2: Track

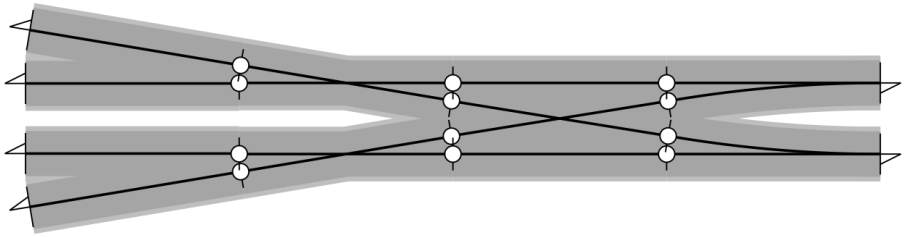


Example 3: Sleepers



NOTE: AnyRail displays sleepers for aesthetic reasons, only. The position shown is not intended to be exact, though the width is correct.

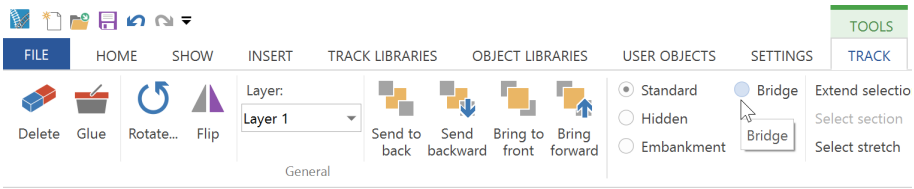
Example 4: Centerline with roadbed



NOTE: To avoid disappointment, use this option to check that the roadbed fits on your train table and that the tracks are not too close to each other.

1.4.3 Track build style

Track can have different build styles. This influences the drawing in 2D, but also in 3D.



Standard

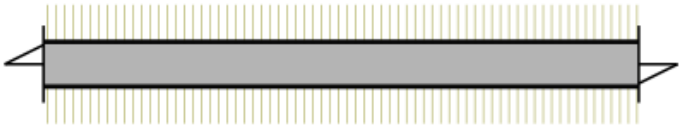
The track is displayed as-is, both in 2D and 3D.

Hidden

The track is displayed as a dotted line in 2D. In 3D, it will be hidden, and a tunnel is created if necessary.

Embankment

In 2D, small lines indicate that the track is on an embankment. In 3D, the ground is shaped as an embankment.



Bridge

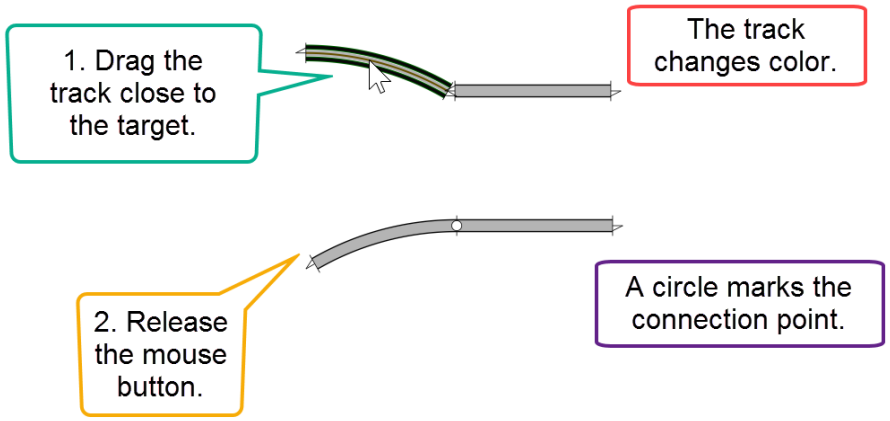
In 2D, trellis is drawn over the bridge. In 3D, the track is put on pillars.

1.4.4 Moving and connecting track

Use the mouse to move and connect your track pieces. By default, only track from the same track system can be connected. However,

you can override this (see The AnyRail SETTINGS Tab 129).

To connect track



Moving connected track

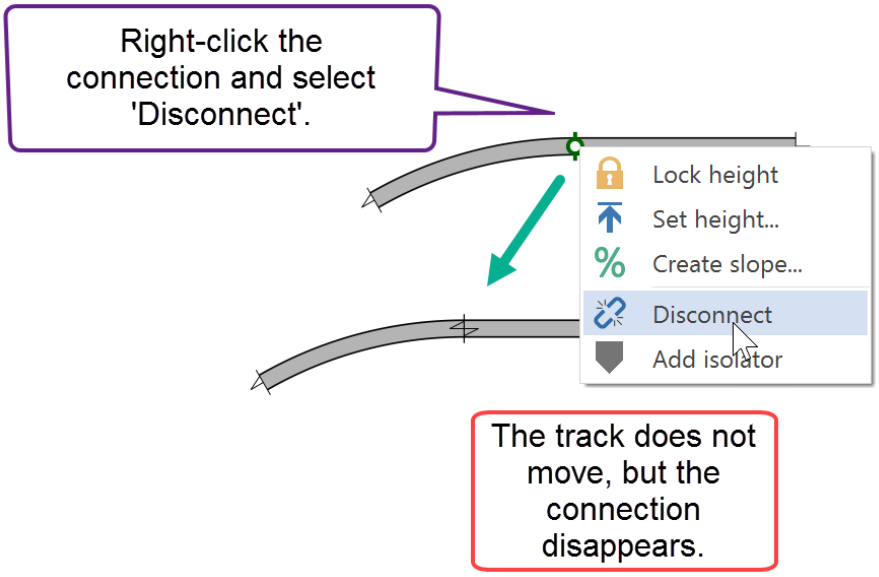
To move connected track

Drag any of the pieces.

1.4.5 Disconnecting track

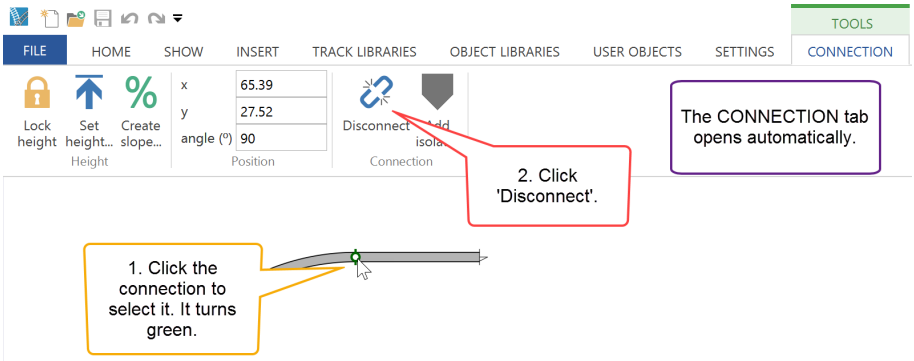
You can disconnect track using the popup menu or the Ribbon.

To disconnect an endpoint using the popup menu

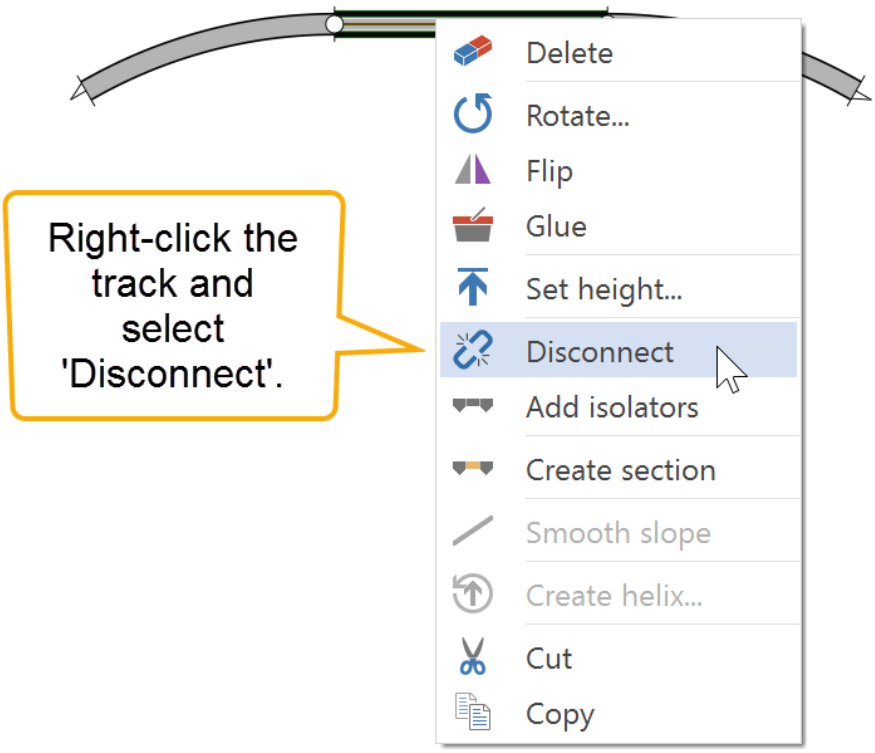


TIP: You can also press DEL on the keyboard to remove a selected connection

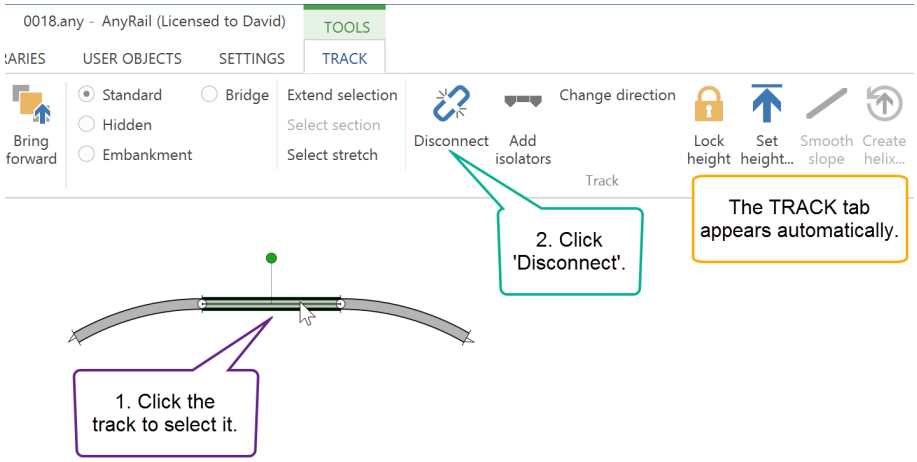
To disconnect an endpoint using the Ribbon



To disconnect the track using the popup menu



To disconnect the track using the Ribbon

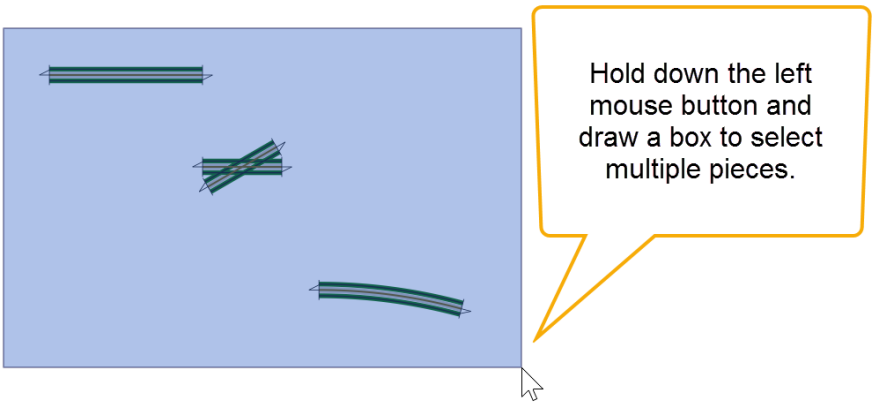


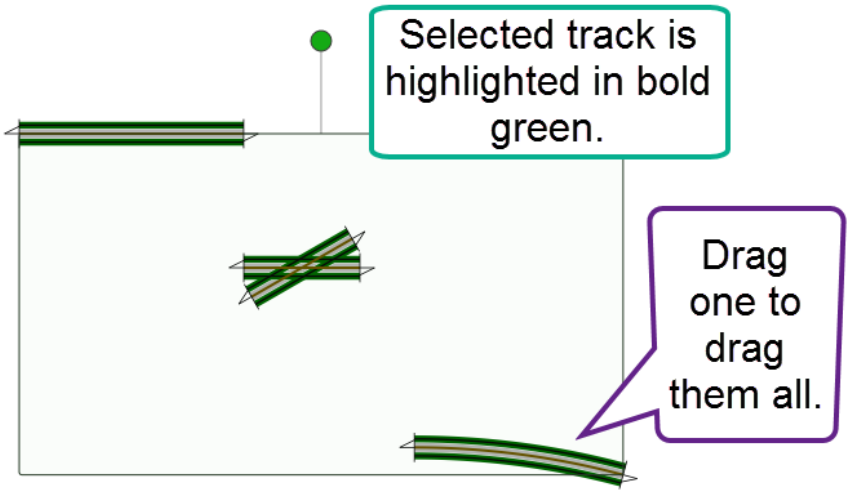
1.4.6 Selecting track

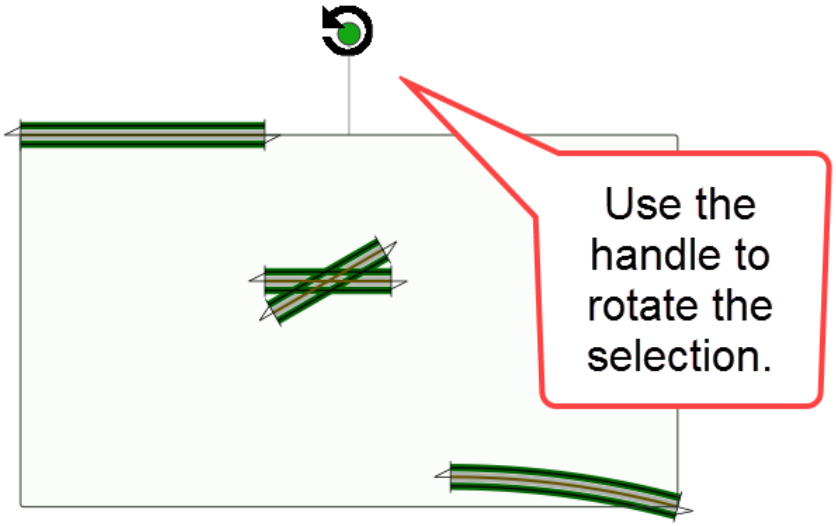
Obviously, you can select one section of track by simply clicking it.

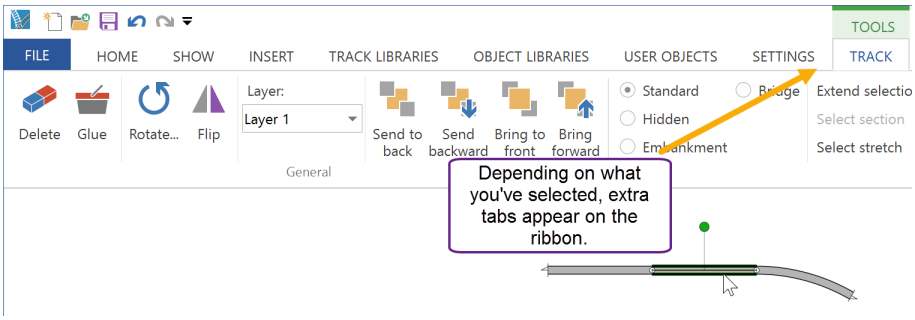
However, you can also use the mouse to select several pieces of track, and then move or alter them as one.

To select track



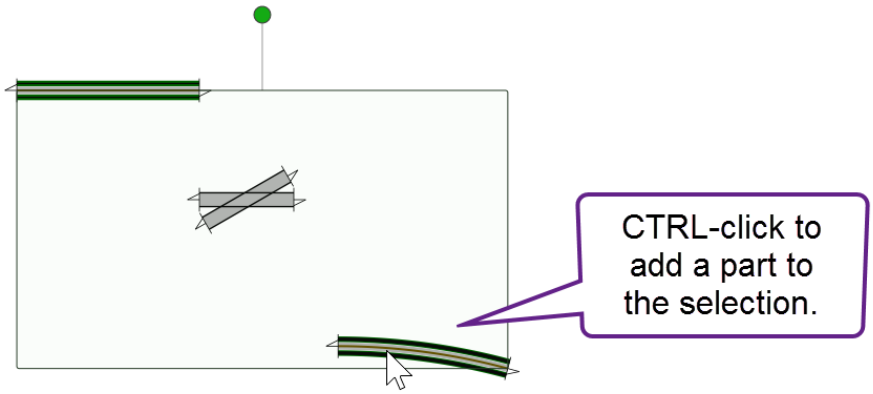




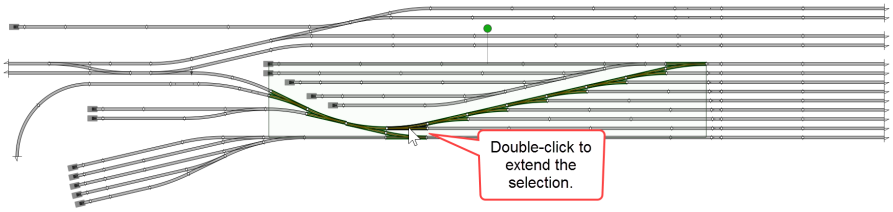


Other ways to select or deselect pieces

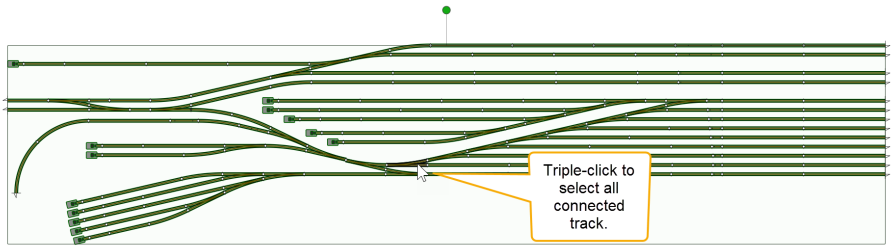
CTRL+click each piece



Double-click a piece to extend the selection in a logical manner

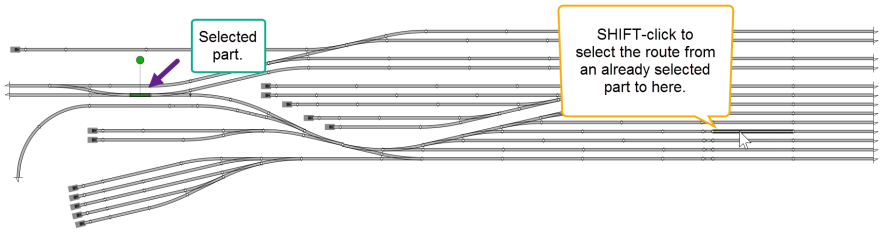


Triple-click to select all connected track

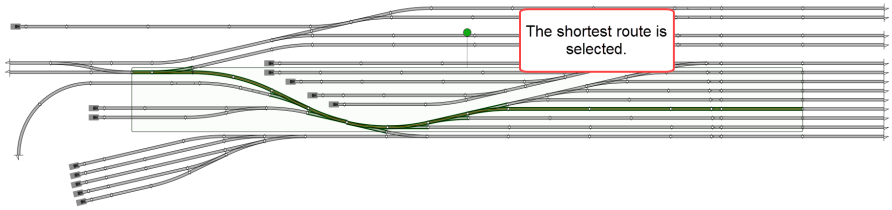


SHIFT-click to extend the selection.

Before:



After:



AnyRail bolds the selected pieces.

To deselect a single piece

CTRL-click the piece.

To deselect all the pieces

Press ESC.

NOTE: You can also copy, paste and delete track in the standard Windows way.

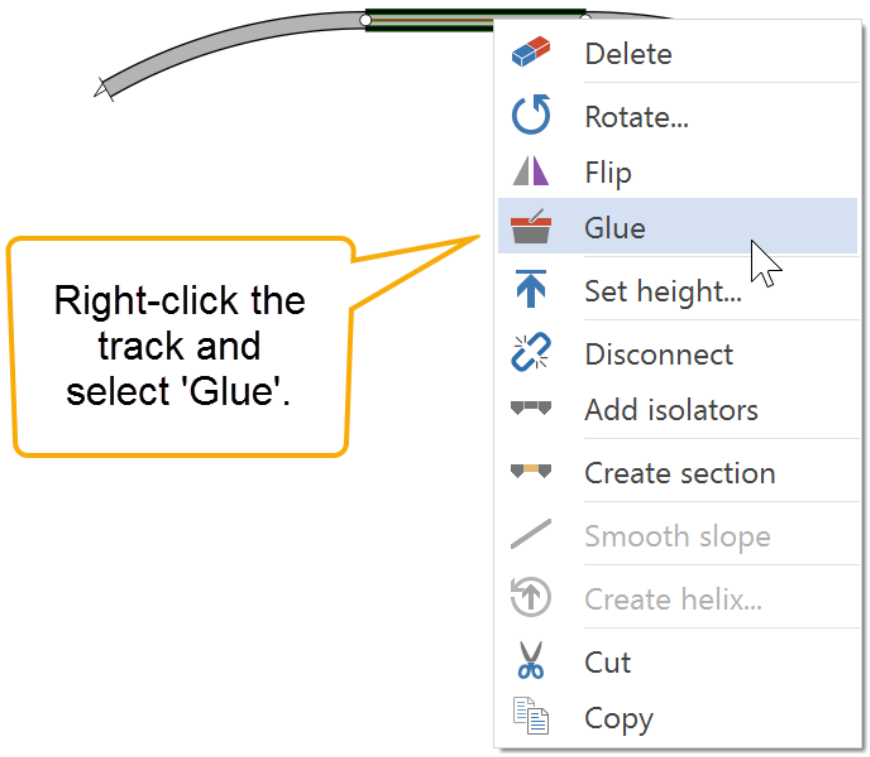
TIP: If you open AnyRail twice, you can copy and paste elements from one layout to the other.

1.4.7 Gluing track

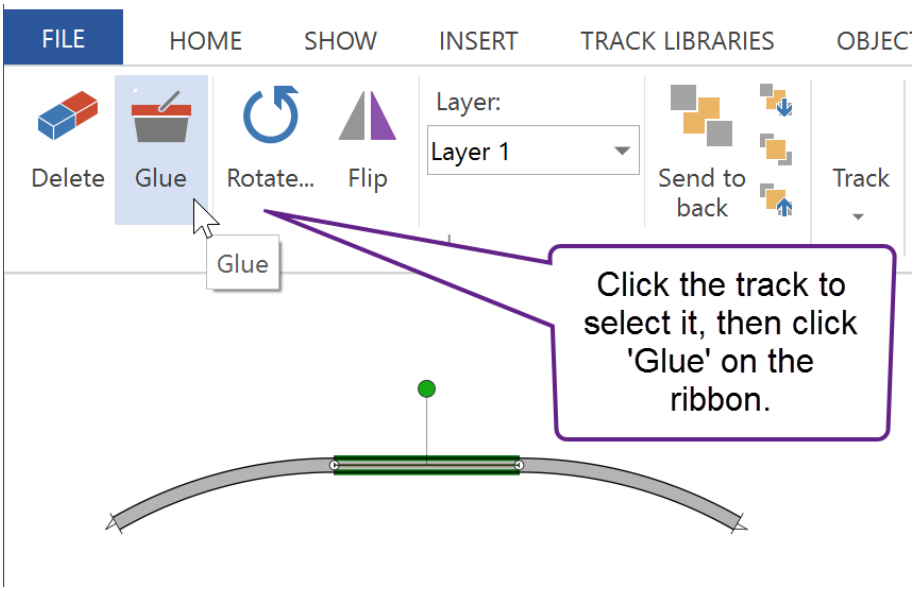
If you want to make sure that you don't accidentally move track, you can glue it down!

To glue track

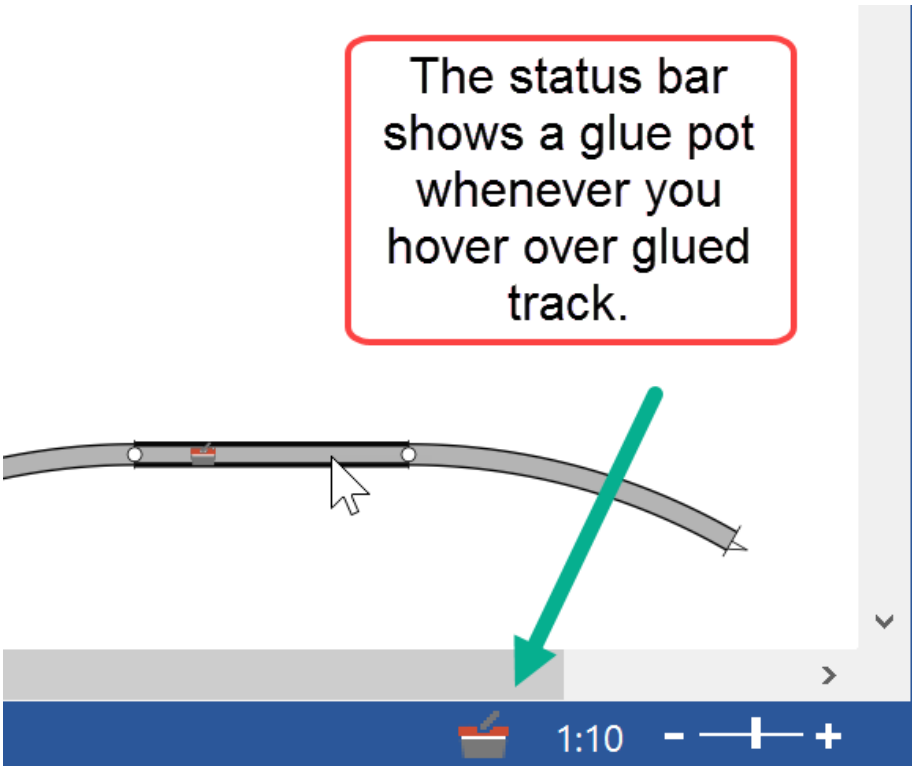
Method 1:



Method 2:

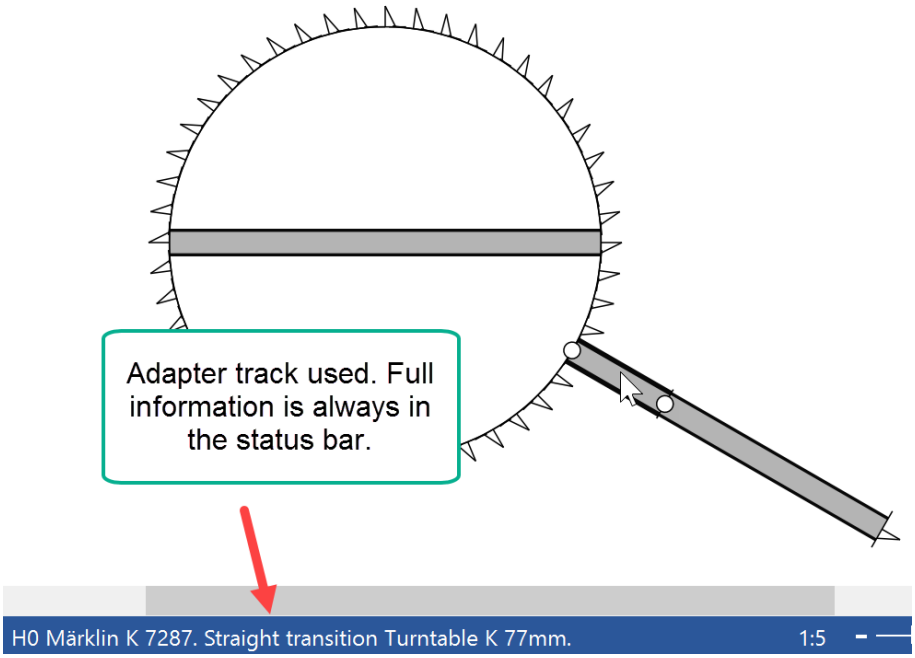


If you want to know whether track is glued, hover over it, and look in the Status Bar:



1.4.8 Turntables

Many turntables require a special adapter or transition track from the same library in order to connect them to the regular tracks at the required angles.



1.4.9 Closing gaps

If you use sectional track, you'll often find that it's difficult to make a perfect fit when your design becomes more complex.

Some manufacturers provide all sorts of filler track just for this purpose.

Sometimes you can make the track fit by using the play (wiggle room) in the track. While this can be considered cheating, sometimes you don't even notice that you're doing just that when laying real track.

In AnyRail, you can cheat a little bit as well.

In general, to close a small gap, you can often disconnect a stretch of track and rotate it one or two degrees to make your plan fit.

To close a gap

1. Switch off **Autoconnect** in the **SETTINGS** tab. When you do that, track will no longer jump into position, but will be left just where you dropped it. If there is another piece of track within the **tolerances** (defined in the **SETTINGS** tab) a connection will be made to it.
2. Disconnect a stretch of track and rotate it one or two degrees so it will fit.
3. Put the track back in place and make sure to connect the outer ends.
4. Turn **Autoconnect** back on.

NOTE: Only resort to this technique after you've tried to make your track plan fit properly.

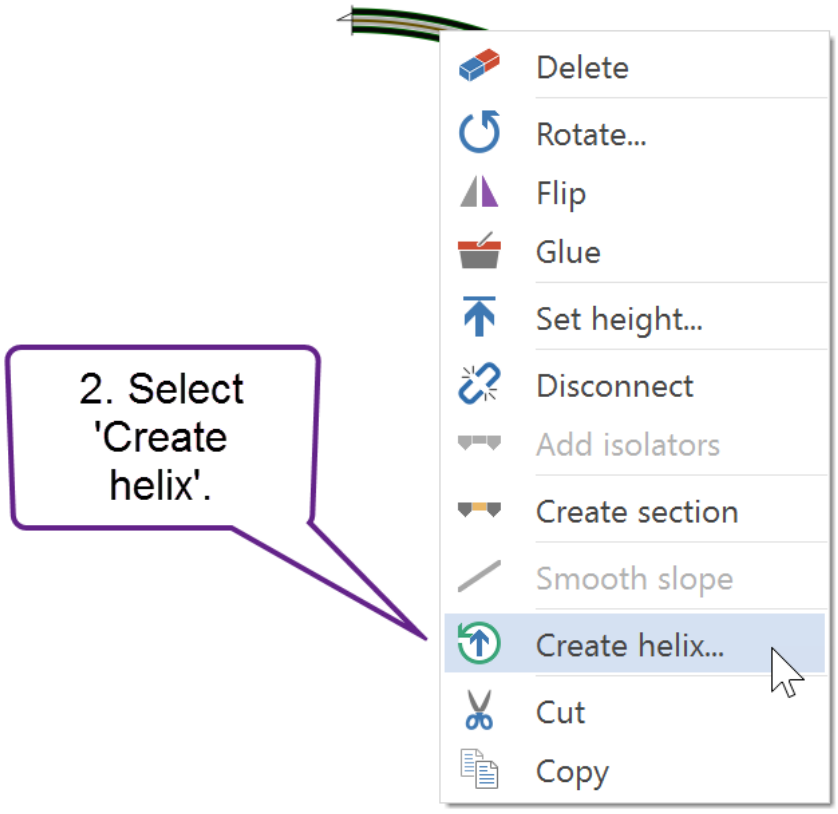
1.4.10 Creating a helix

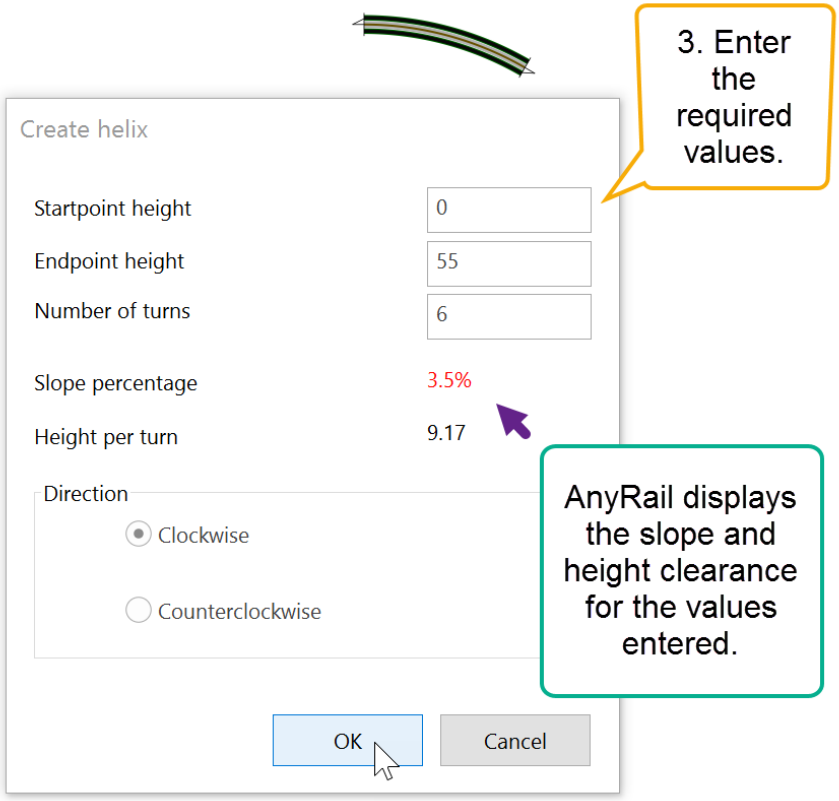
A Helix is a corkscrew made from track, with the purpose of bringing trains to another level of your layout.

In AnyRail, they're easy to generate from a single curve.

To create a helix

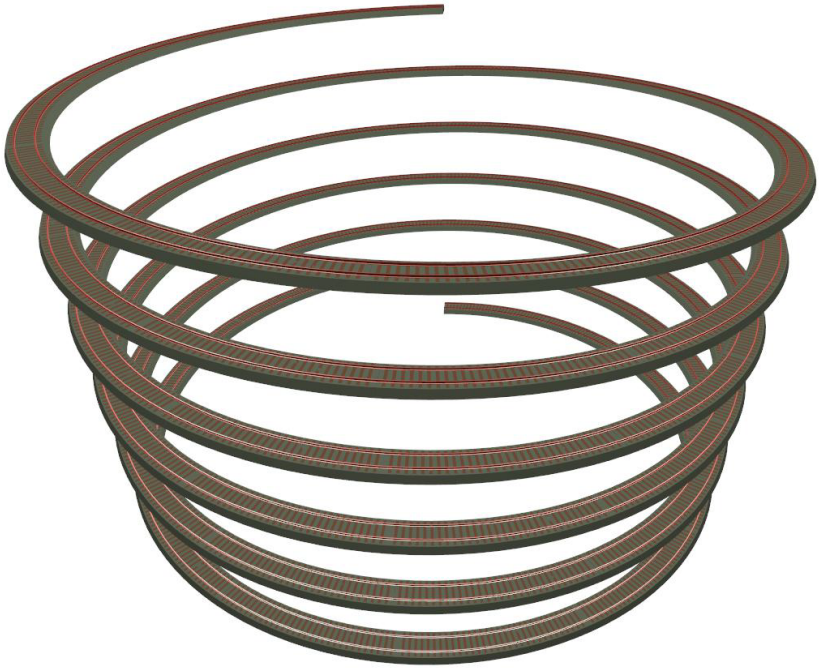
1. Right-click a single, unconnected curve of your choice. This can be a piece of flex, after you've used the curve flex 38 function.





4. Click **OK**.

5. To get an impression of the result, use the **3D view** from the **HOME** tab:

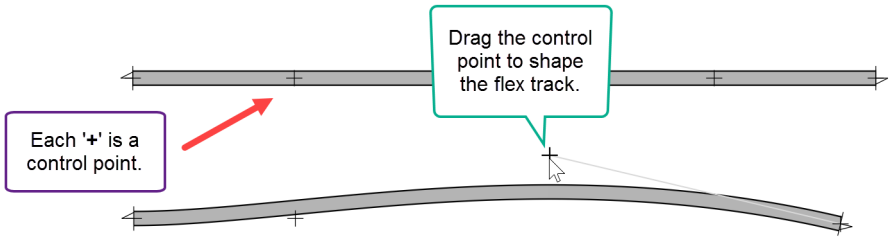


1.5 Flex track

Many sectional track manufacturers also provide "flex track". Flex track can be used to fill gaps. Its looser curves also give your layout a more natural look.

1.5.1 Basic handling

Some libraries contain “flex track”, designed to be bent, stretched and trimmed. You can do this to AnyRail flex track by using the control points. These are the little crosses that appear at either end of a piece, and on either side of it. Dragging the control point changes the track.



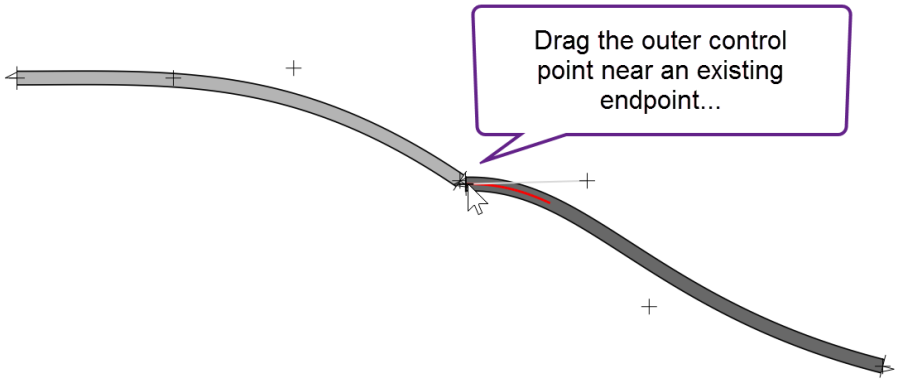
AnyRail checks the track as you shape it and paints it red if:

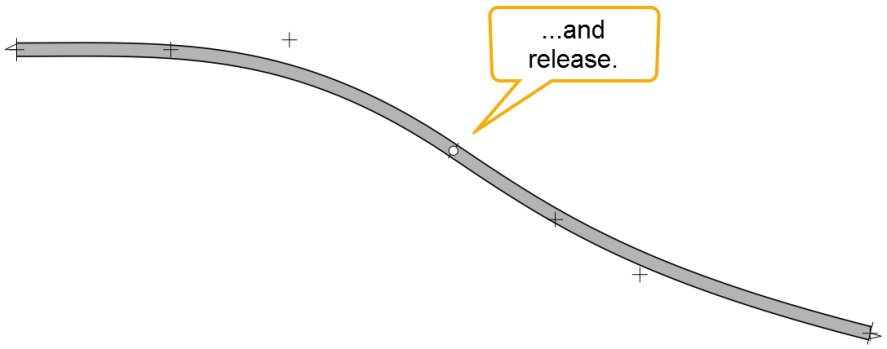
- You over-stretch it
- You bend it into overly tight curves (likely to derail a train)

Of course, these features can be switched off (The AnyRail SETTINGS tab 129).

To connect flex track

- Connect flex track in the usual way by dragging it near another part.
  Or
- Drag one of the outer control points onto another endpoint.





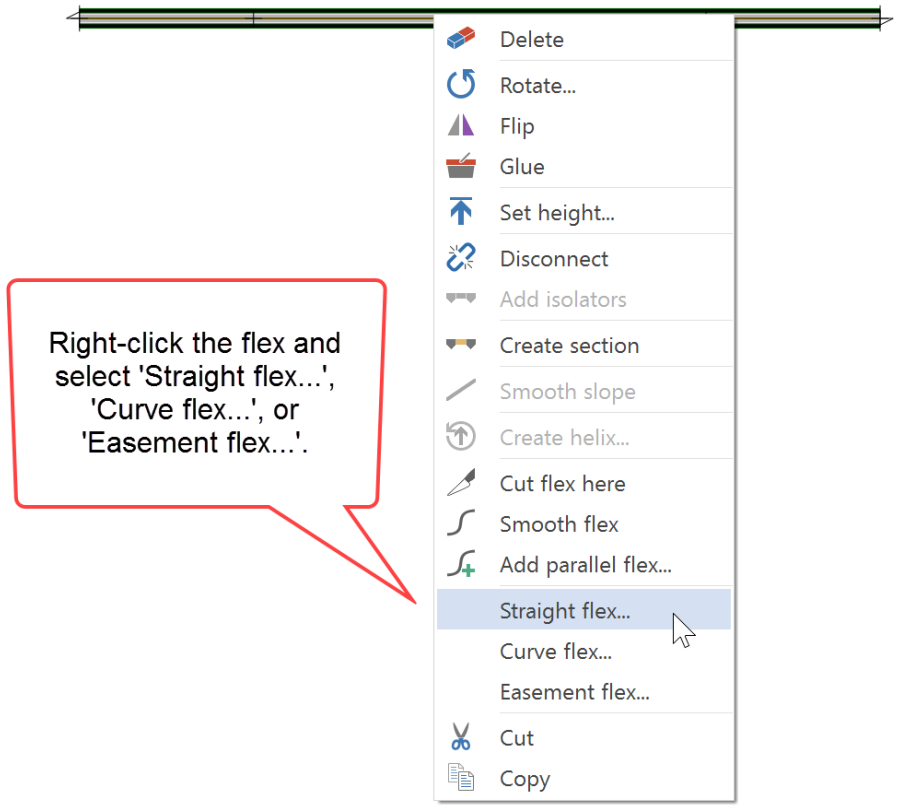
AnyRail smoothes out the curves of the resulting track.

TIP: Pressing SHIFT while dragging a control point keeps it in a straight line.

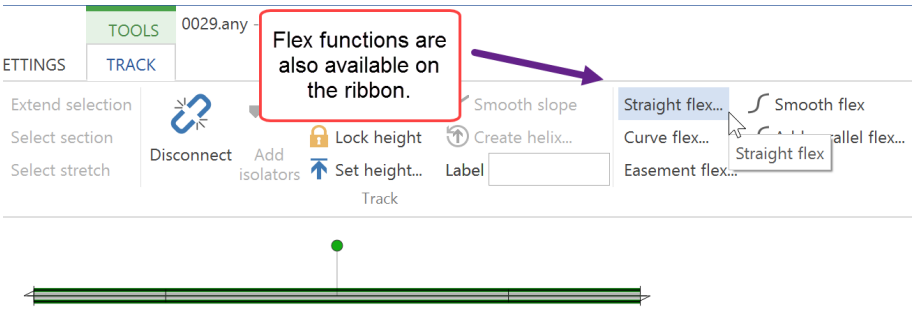
1.5.2 Curves, straights and easements from flex

AnyRail can create (near) perfect arcs, easements and straights from flex track.

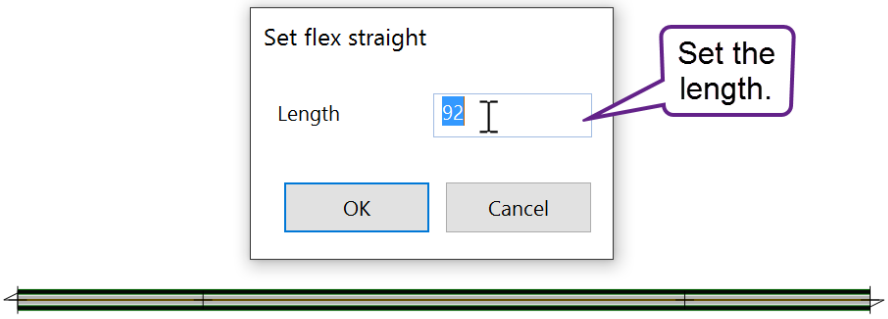
To create a straight, curve or easement



Alternatively, click the flex, and select from the Ribbon:

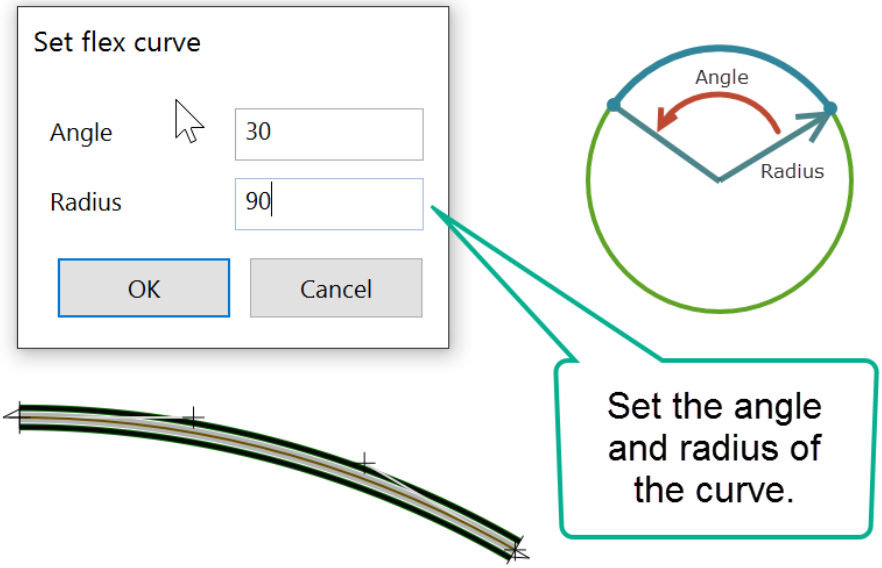


A straight



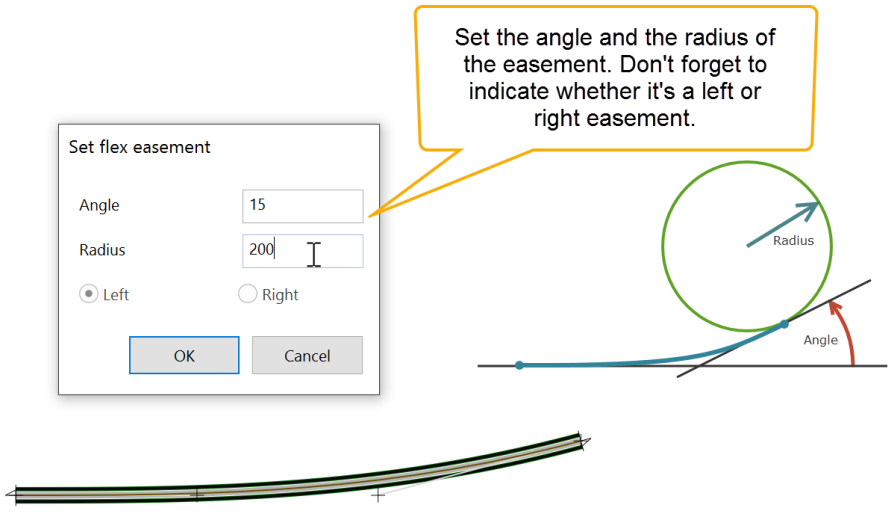
A curve

Creating a precise curve (circular arc) is similar to straightening a piece of track.



An easement

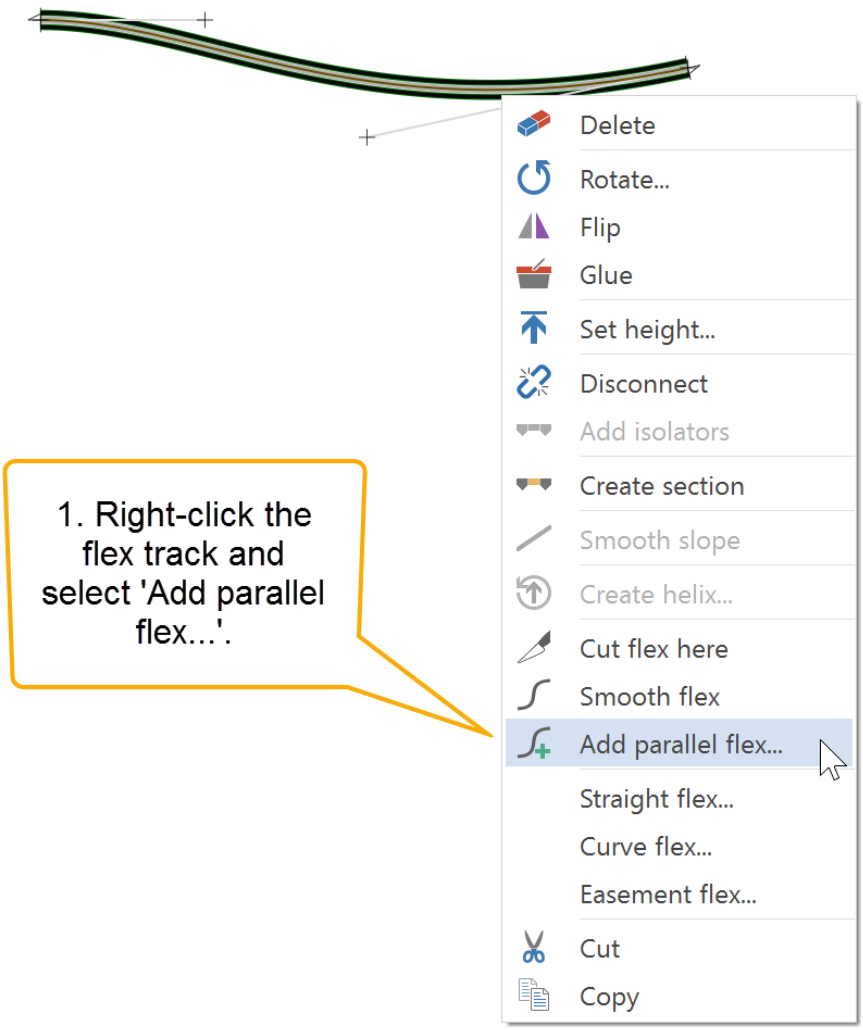
An easement provides a smooth transition between a straight and a curve. Real railways always use them to avoid wear and tear, and to permit higher speeds. They also increase passenger comfort.

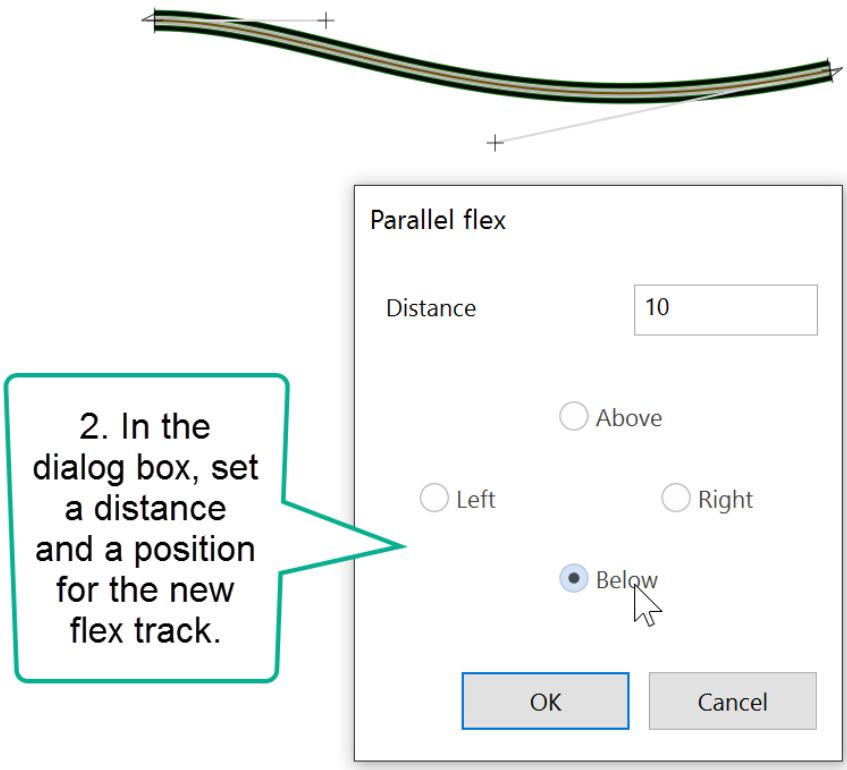


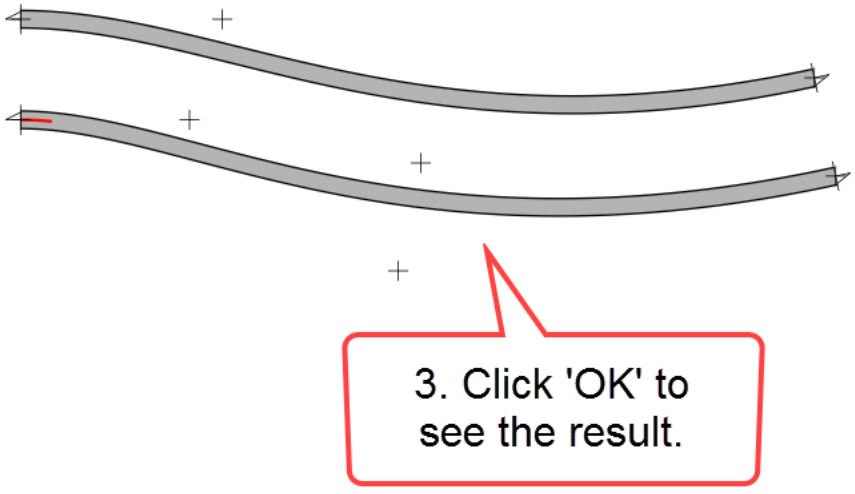
1.5.3 Parallel flex track

AnyRail can create parallel flex track.

To create parallel track





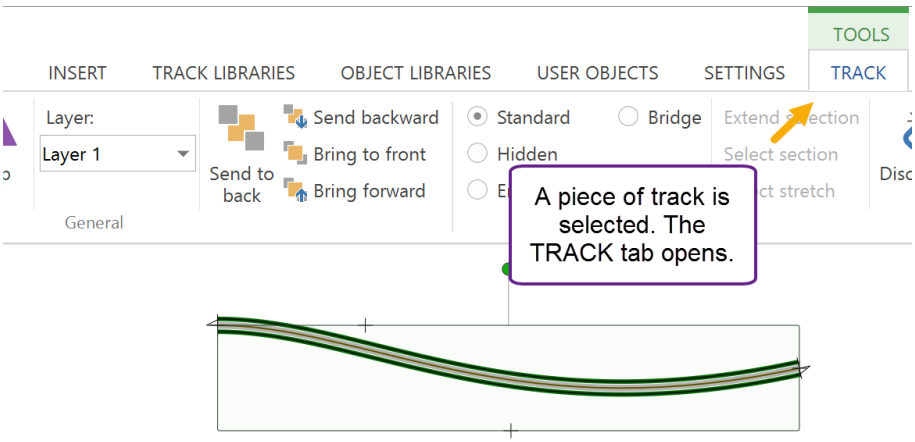


1.6 The Ribbon and the Popup menu

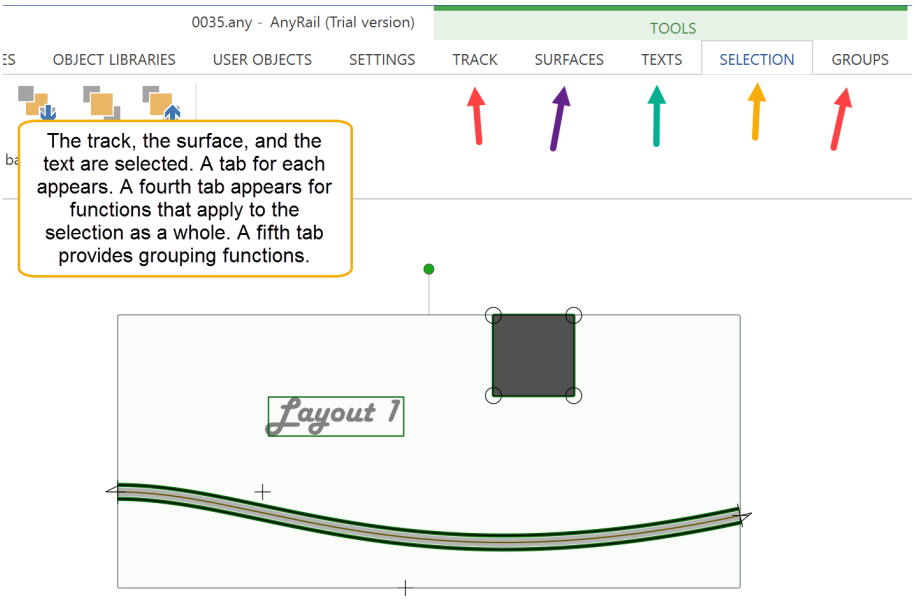
The Ribbon

When you select something, the ribbon shows you what you can do with it and grays out any options that don't apply.

Example 1: Select a flex



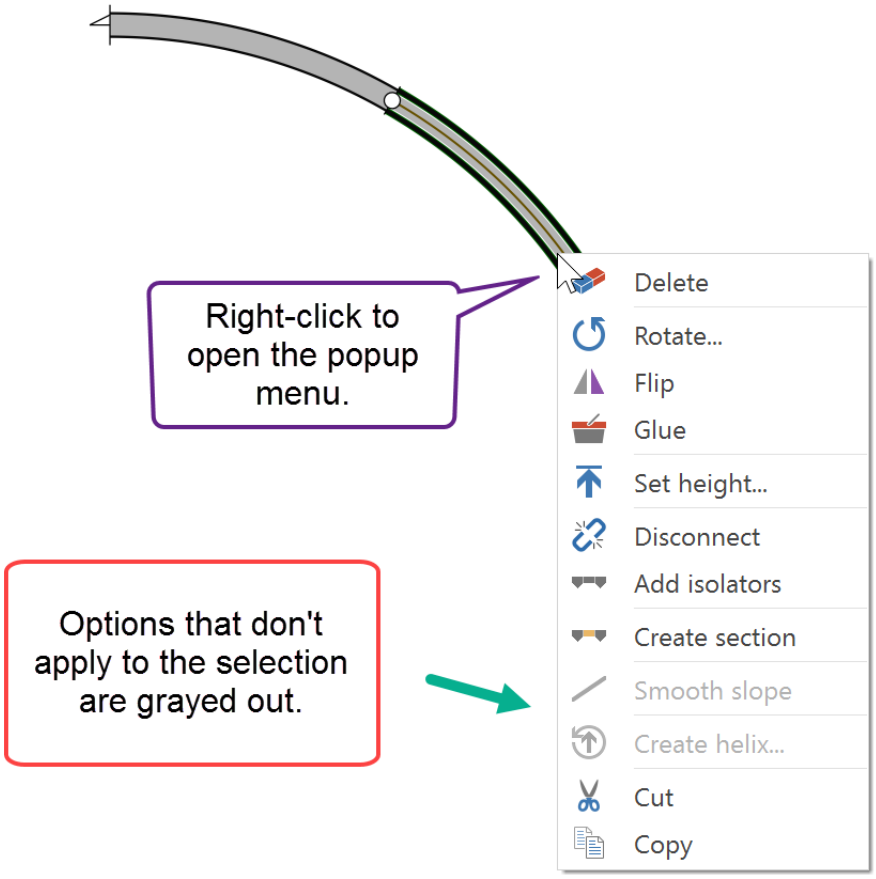
Example 2: Select a flex, a surface, and some text



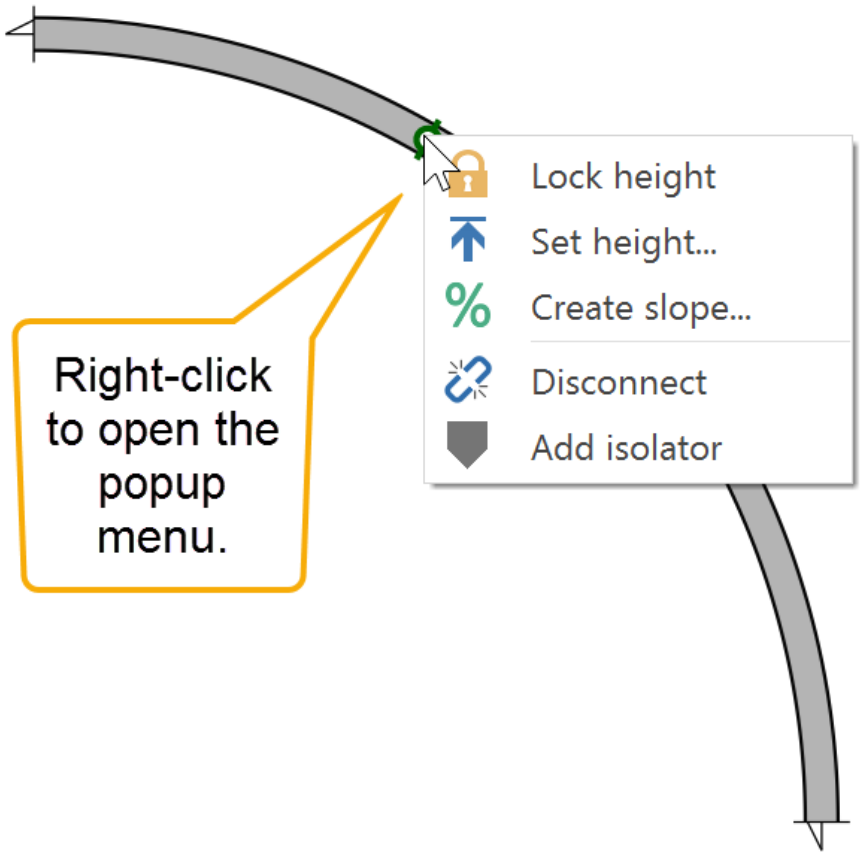
The Popup menu

A handy feature of AnyRail is the menu that "pops up" with relevant options whenever you right-click something.

Example 1: Right-click a stretch of track



Example 2: Right-click a connection

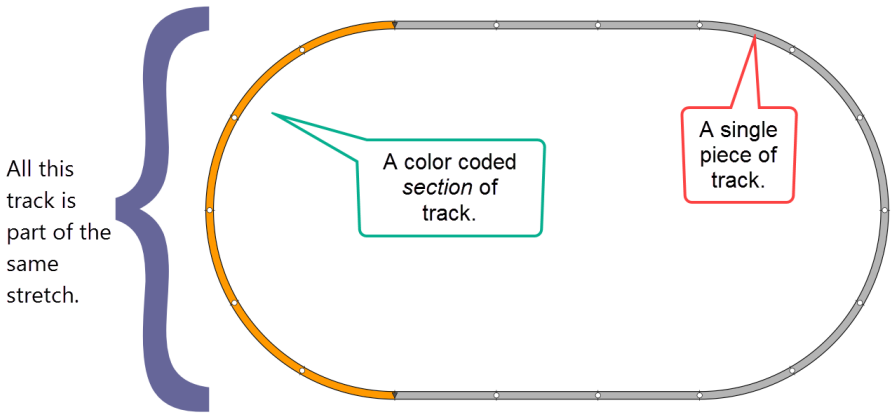


There's a description of each option in the Reference Guide 99. The next couple of chapters cover the more commonly used ones.

1.7 Pieces, stretches and sections

AnyRail thinks of your track as being made up of *pieces* , *stretches* and *sections* .

A **piece** of track is just that – any one of the components you select from the Track Libraries. A **stretch** of track is a piece and all pieces connected to it. Many AnyRail options apply to stretches rather than pieces. A **section** of track is something that *you* create, and requires more explanation.



Sections

A section is a stretch of track with a specific function or purpose, as defined by you. You can turn any stretch – that is a connected group of pieces - into a section, as long as both ends have an isolator.

Sections are useful in both conventional and digital operation:

- In conventional (analog) operation, you need to feed stretches of track individually to control trains independently of each other. This enables you, e.g., to switch off a section's power to stop a train for a red signal.

- In digital operation, especially with a PC, it is often handy to know where trains are so that the software can control them. Usually, the layout is divided into sections of track, each with its own occupancy detector. The shorter the sections, the more accurate the positional information.

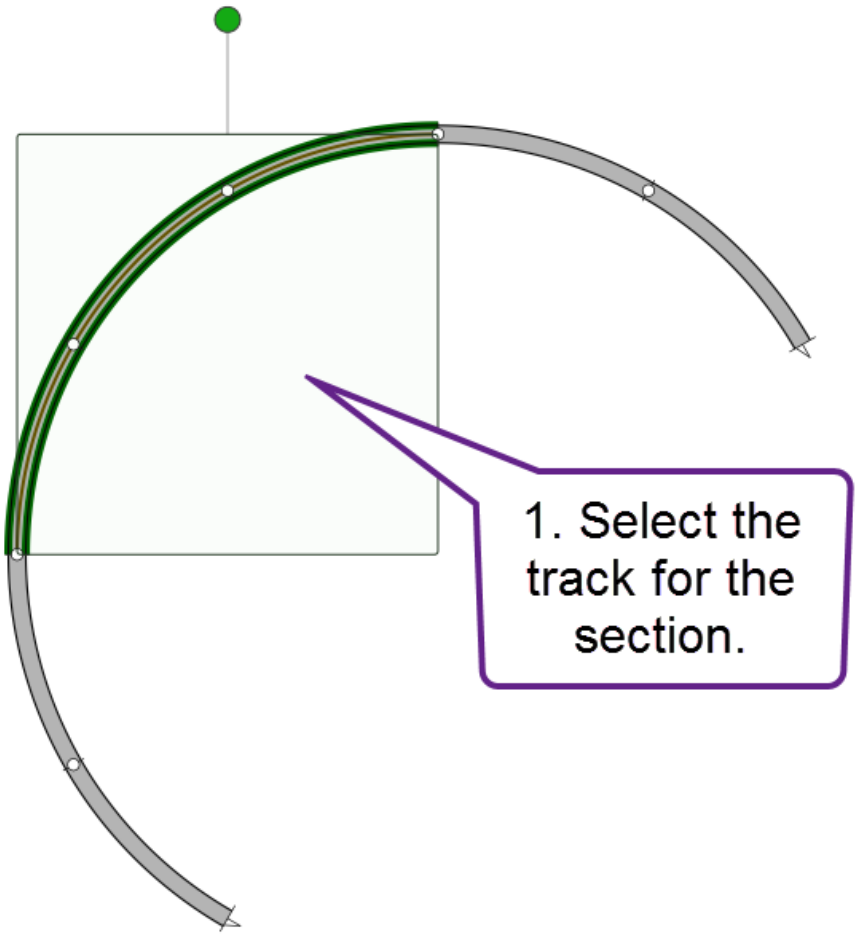
NOTE: Once you've created a section, you can change its properties such as color, name and usage. You can also see a list of sections. This is helpful when

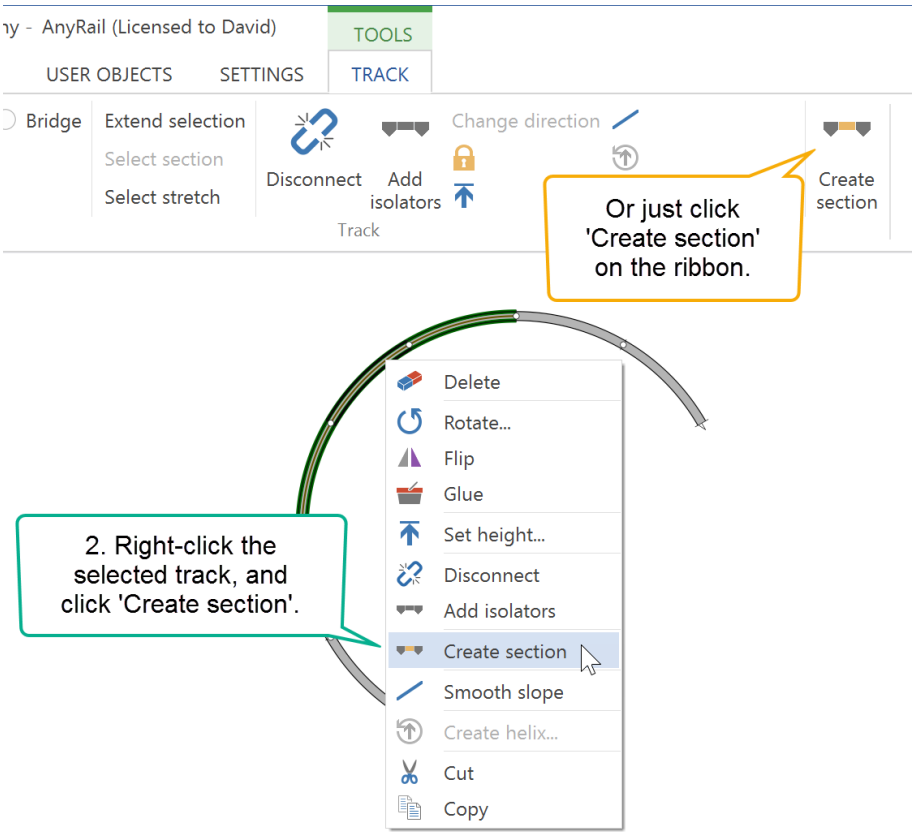
calculating how many occupancy detectors you need. See Generating a list of sections 94.

1.8 Working with sections

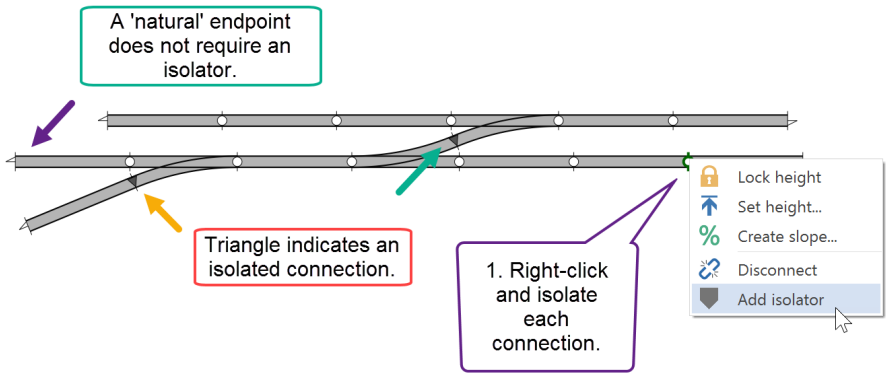
Here are the two methods for creating a section.

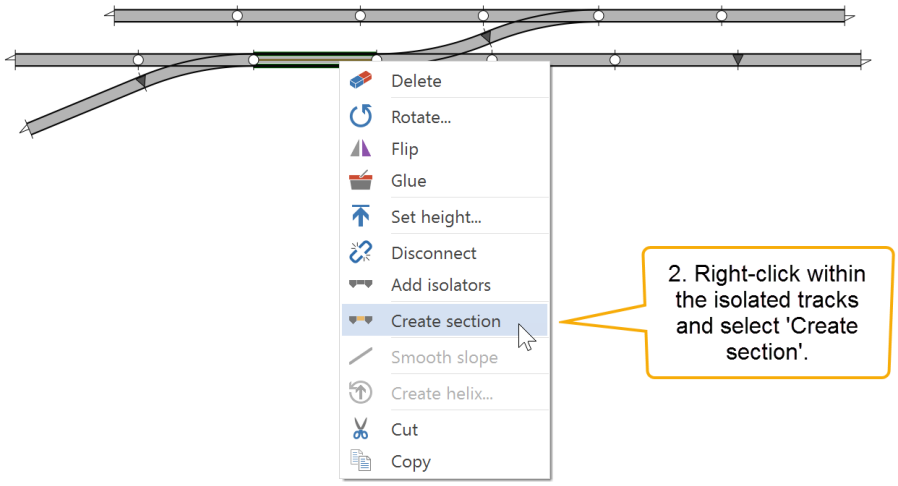
Method 1: Creating a section from selected track

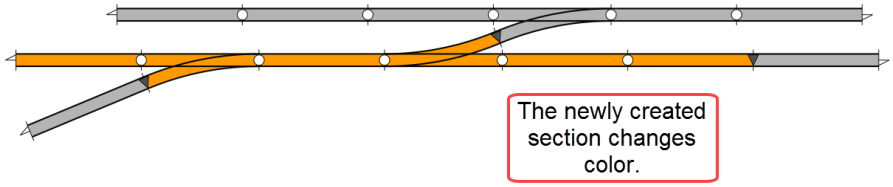




Method 2: Creating a section from isolated track



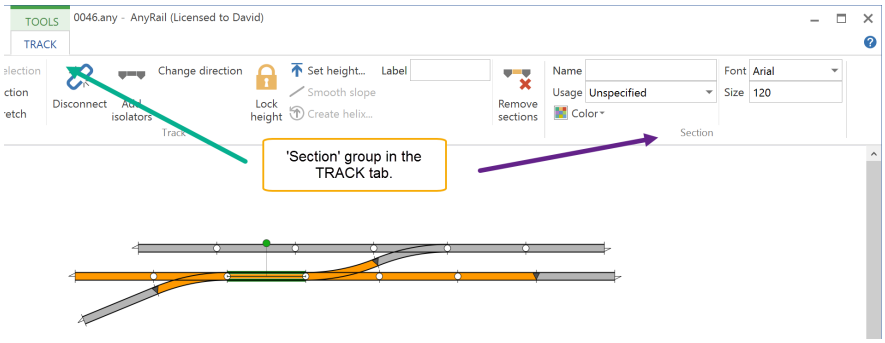




TIP: Of course, you can also use the Ribbon to create the section. Left-click one piece of track within the isolated tracks to select it, and click **Create Section** in the Ribbon

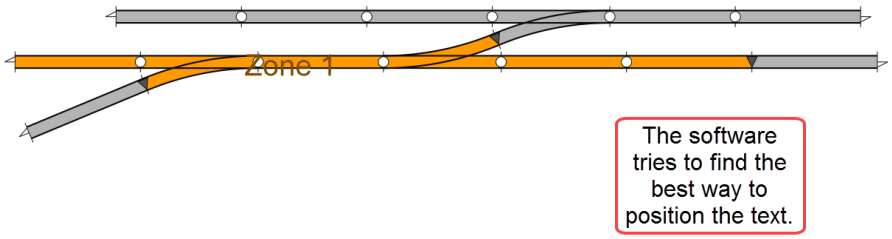
To change a section's properties

1. Left-click a piece of track in the section. The Ribbon opens the **TRACK** tab with a **Section** group:



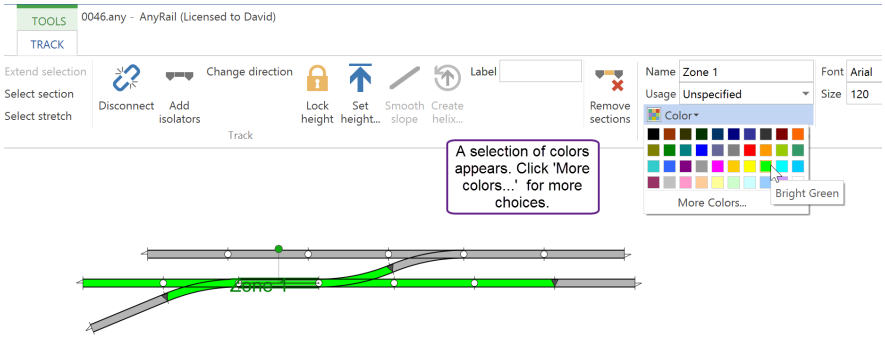
2. Select a **Usage** and enter a **Name**.

The name appears on the layout:



To change a section's color

1. In the Ribbon **TRACK** tab, **Section** group, select **Color**. A color selection box appears:

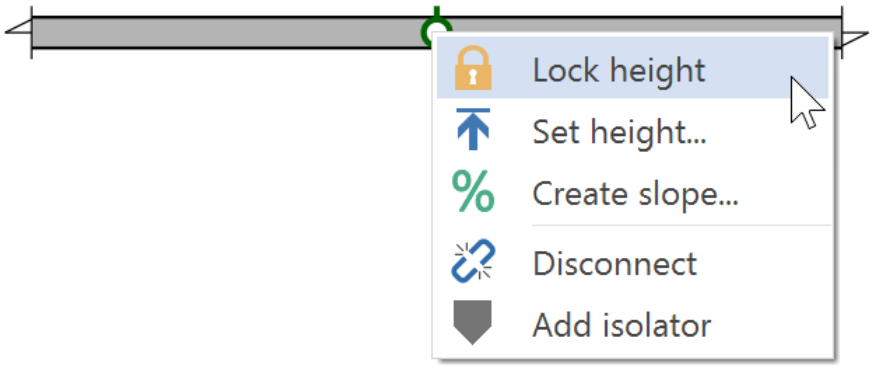


2. Select a color.
   The section changes color.

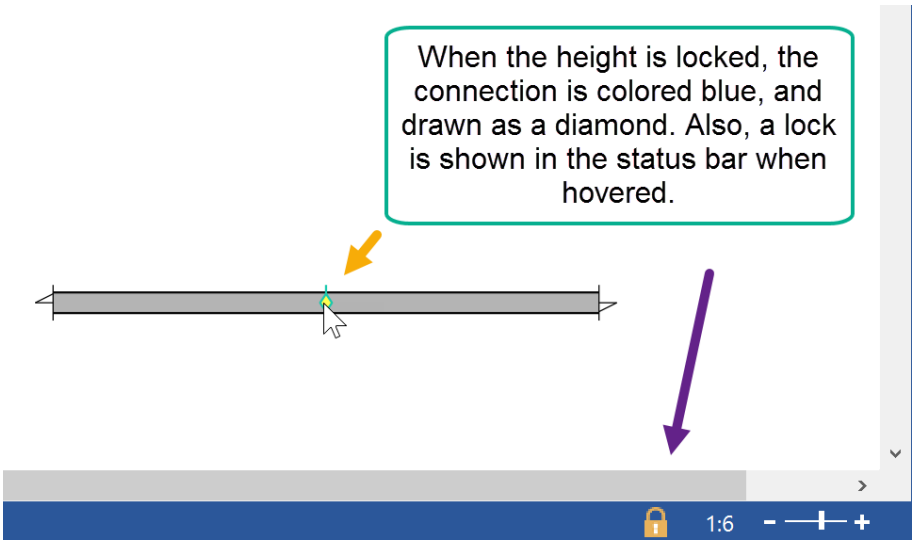
1.9 Working with height

Few model railway layouts are entirely on the same level. Fortunately, AnyRail can handle track at varying heights.

If you want to make sure that the height of a certain point is not changed accidentally, right-click it, and select **Lock height**.



The point turns blue to indicate that its height is locked:

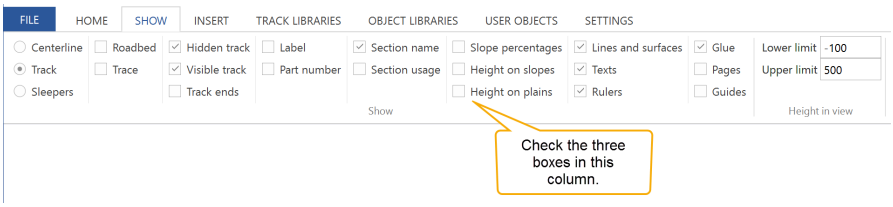


1.9.1 Displaying heights

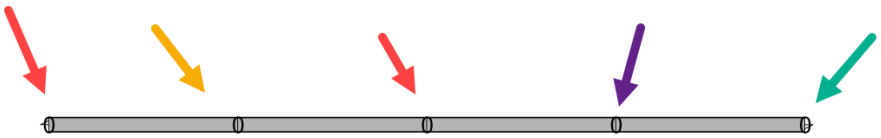
Before working with heights, it helps to switch on their display.

To display heights

- In the Ribbon **SHOW** tab, find the **Show** group:



Heights now appear on the track:



1.9.2 Specifying heights

There are various ways to create a slope, or set the height of track.

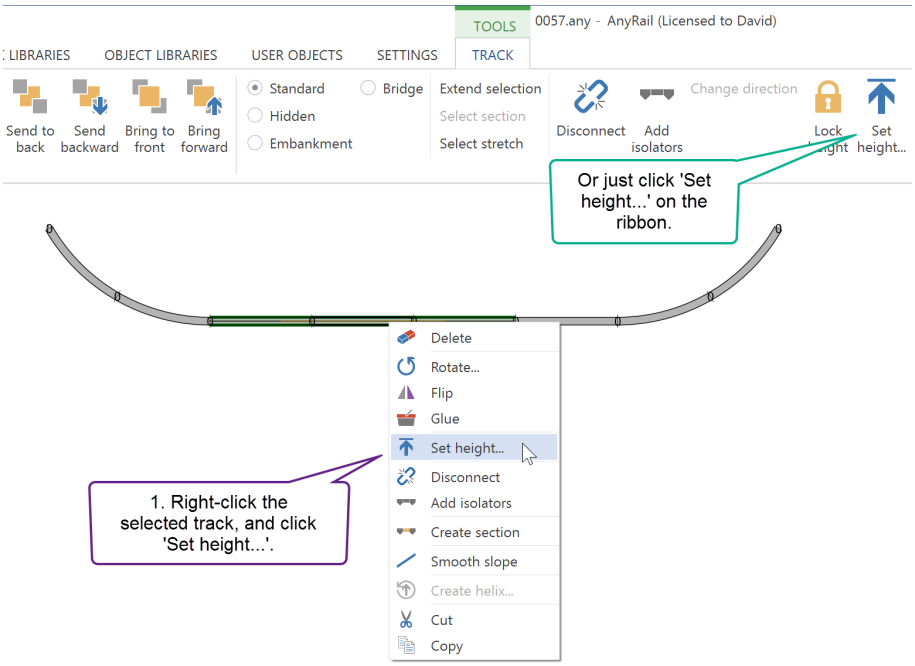
As it can be on a slope, a piece of track doesn't necessarily have a single height. AnyRail works out the height based on the track's endpoints and connections.

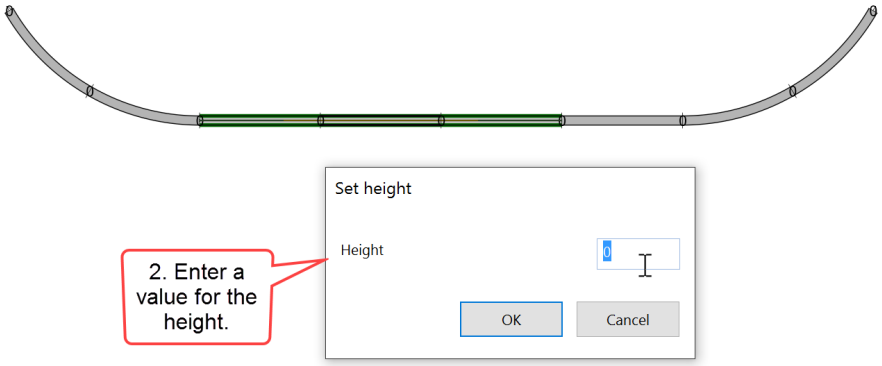
You can specify a certain height for a stretch of track, and then ease the connected track into sensible gradients.

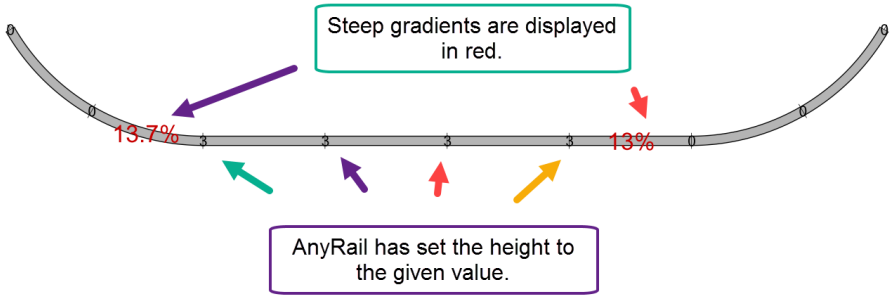
AnyRail will show a warning if slopes are too steep.

TIP: If your tracks cross, make sure you leave enough headroom for the lower train, and any possible overhead lines! Bear in mind the thickness of the tracks, the sleepers, and the actual bridge.

To set selected track to a certain height







To specify a height for a point

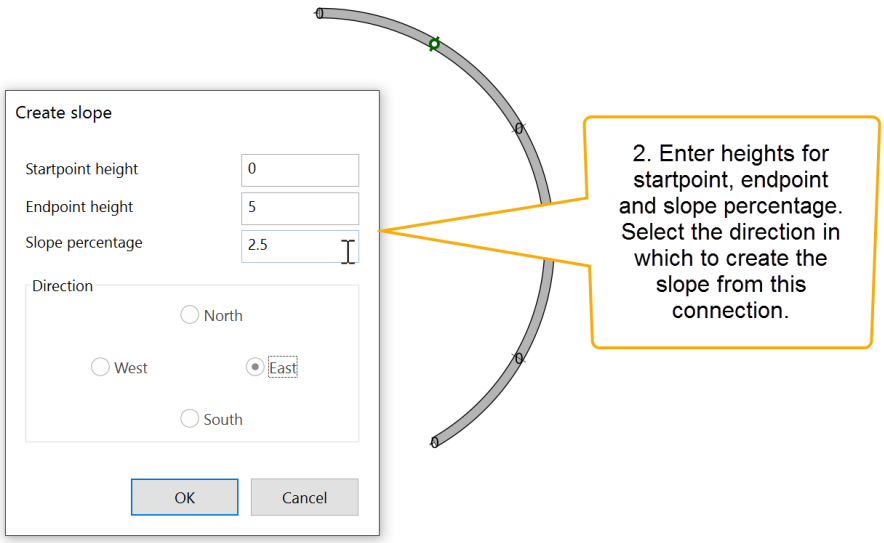
This function is useful when you want to set the height of an individual point.

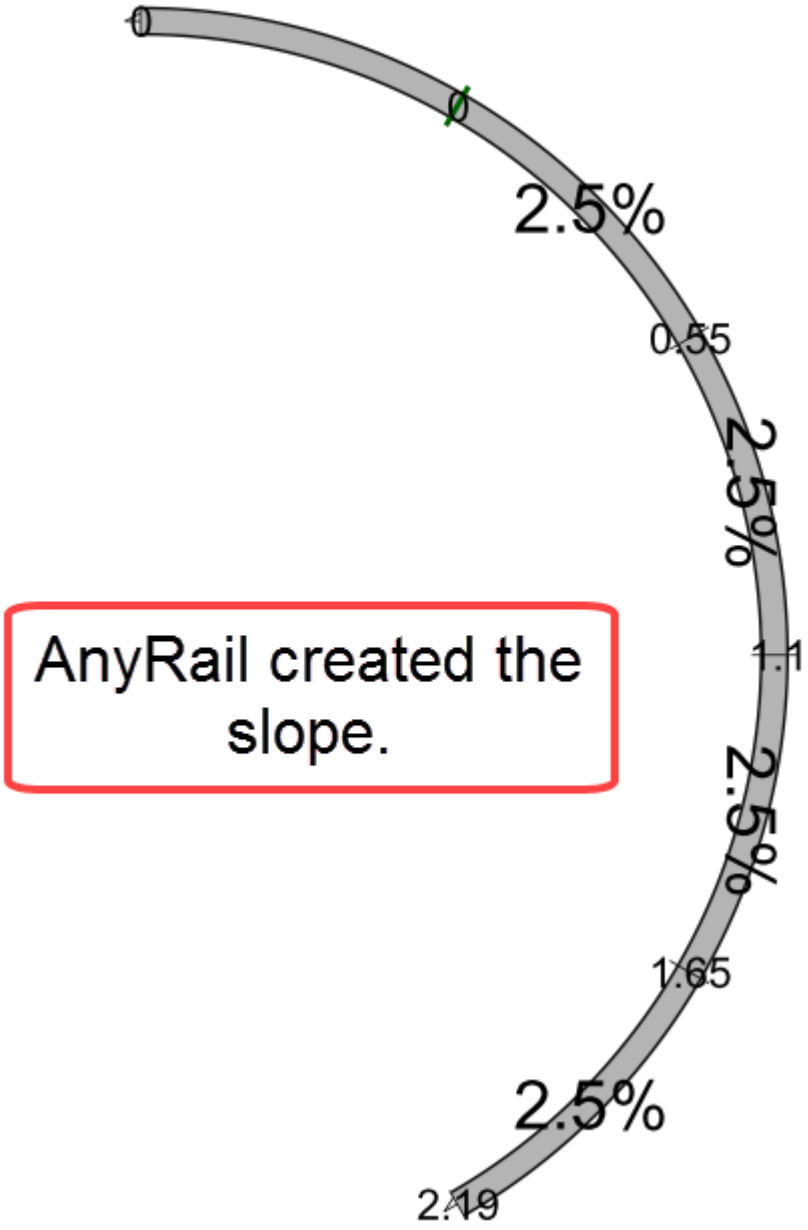
1. Right-click the point (this is an endpoint or a connection), and select **Set Height**....
   Alternatively, select the point by left-clicking it, and in the Ribbon **TRACK** tab, select **Set Height**...
2. Set the height.
3. Click **OK**.

To create a slope

This function creates a slope starting from a connection or an endpoint.

1. Right-click the point (this is an endpoint or connection), and select **Create slope...**.





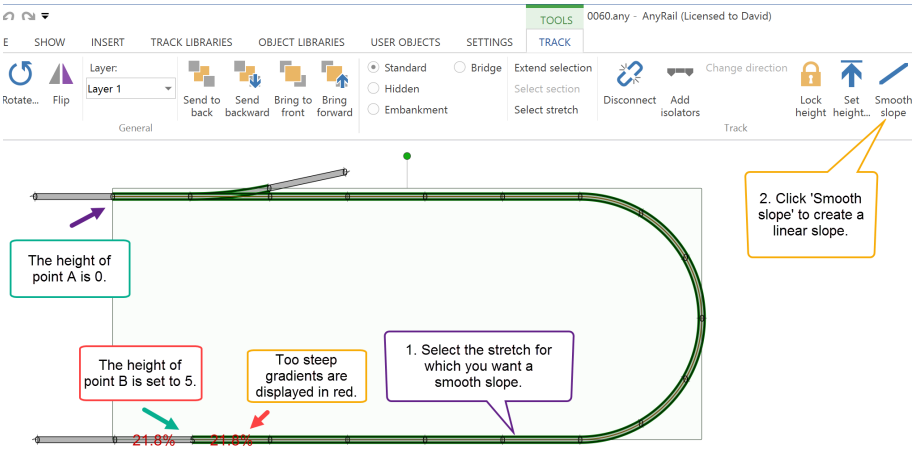
To create a smooth slope

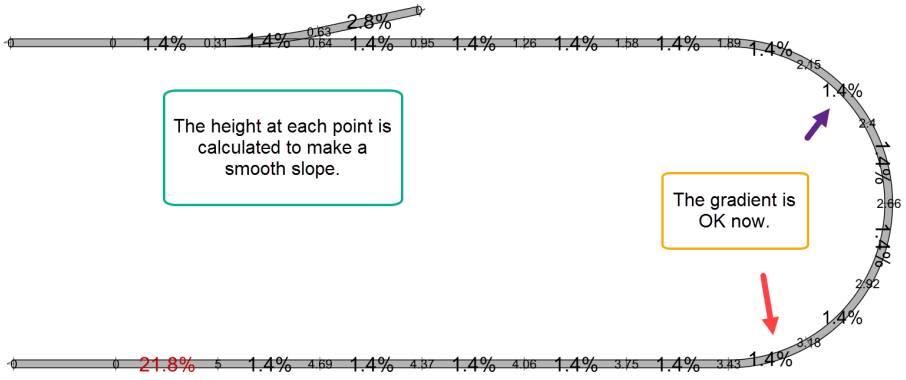
Sometimes, it's useful to create a slope between two points, where AnyRail calculates a linear descent percentage. This is called a smooth slope.

There are a few restrictions when creating a slope from point A to point B.

- All the track on the slope should be connected.
- There should be only one 'path' from A to B.
- The path may go through turnouts and crossings, but the path may not split to a third point.
- Point A and point B must be on a regular straight or curve, not a turnout or a crossing.

NOTE: This feature works best when A and B have a different height!

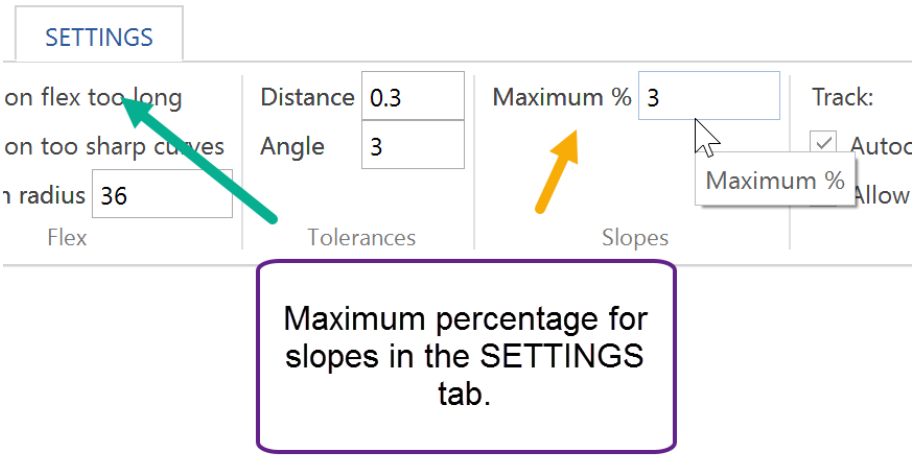




To set the maximum percentage for slopes

All gradients exceeding this value are diplayed in red.

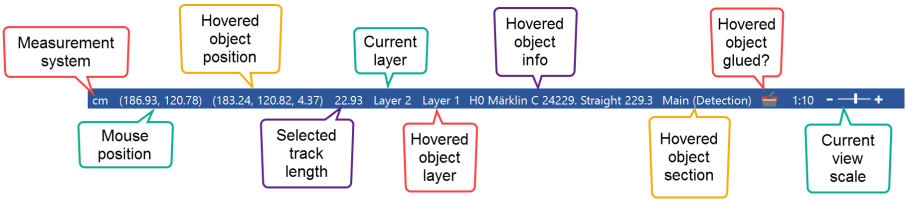
1. Open the Ribbon **SETTINGS**, and locate **Slopes**.



2. Set the **Maximum** percentage.

1.10 The Status Bar

There's a lot to keep track of if you use all of AnyRail's features. The good news is that the Status bar is a mine of information:



1.11 More than just track

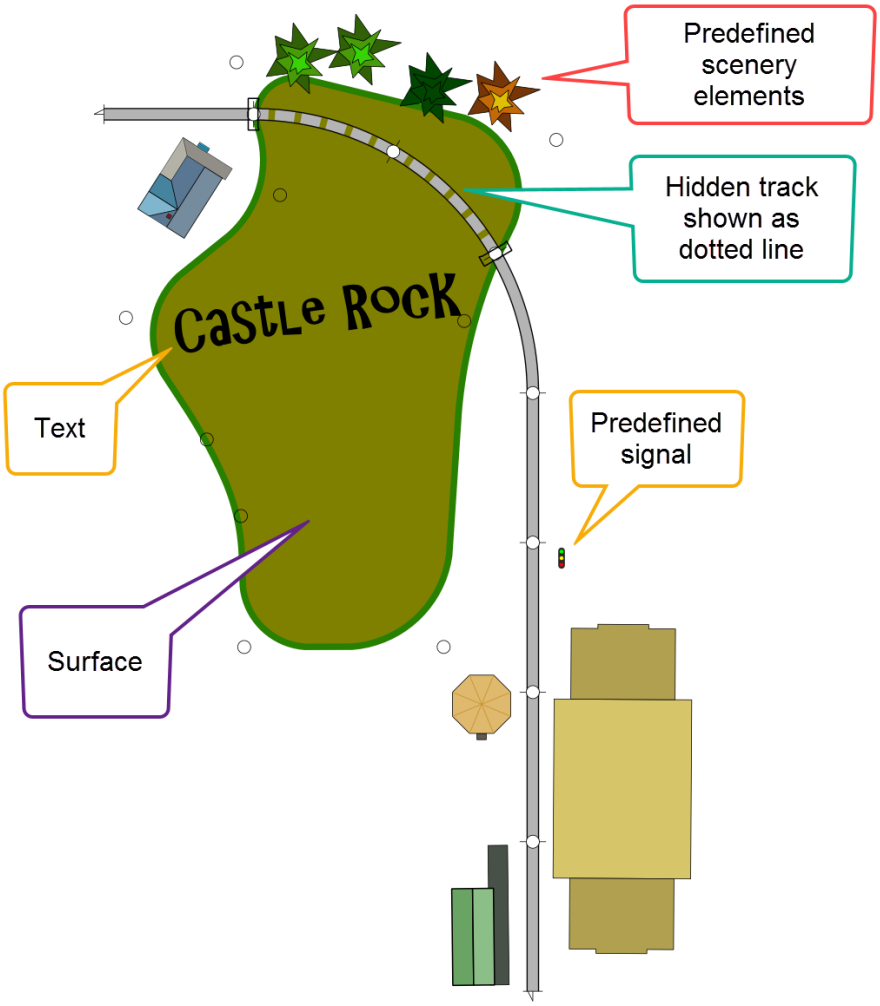
Being enthusiasts ourselves, we suspect that your layout will contain more than just track!

For this reason, AnyRail enables you to draw shapes 59 onto your layout to represent scenery, such as stations or landscape features.

Of course, you can draw your train table or your garden.

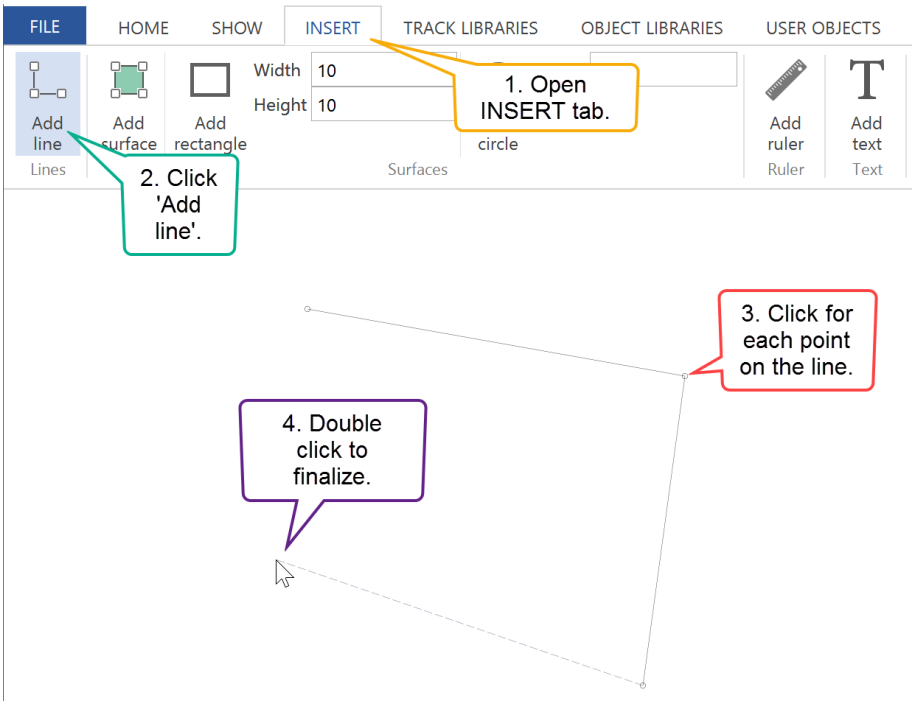
You can also mark track as hidden, and add text 67 labels and position them as required.

Additionally there are plenty of predefined elements 70.



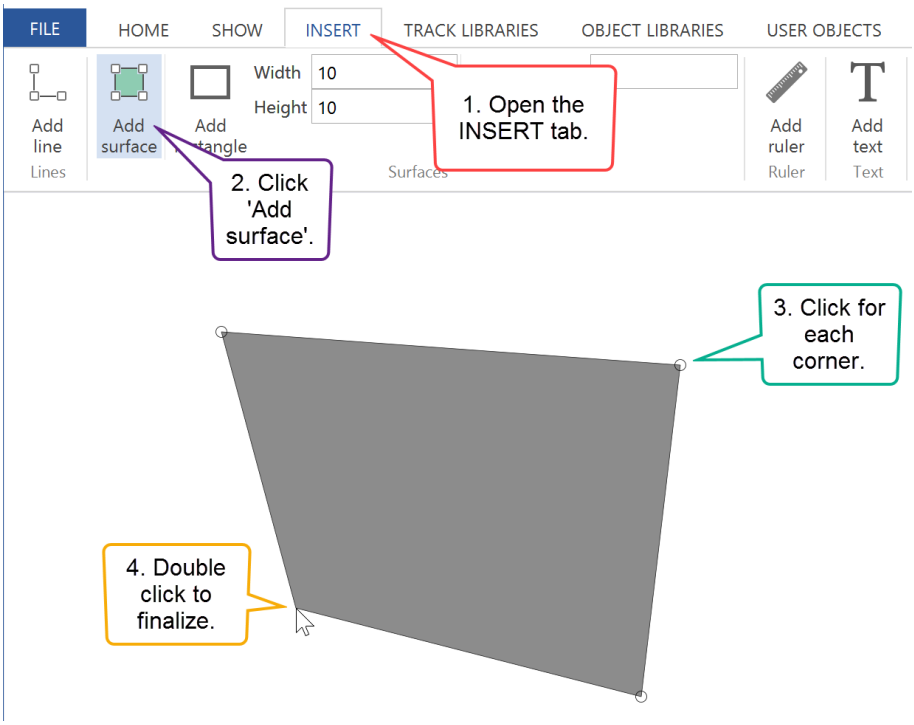
1.11.1 Adding lines and surfaces

To add a line

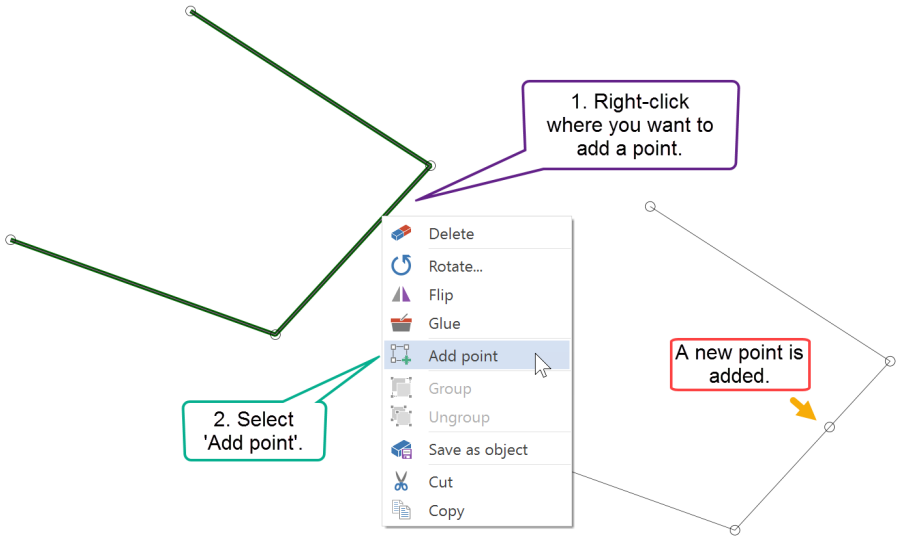


TIP: You can also right-click on the work area, and select **Add line** from the popup menu.

To add a surface

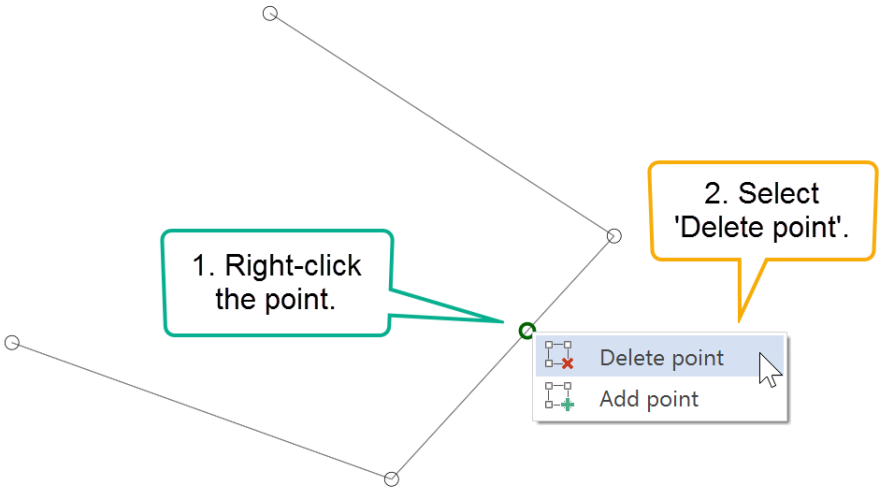


To add a point to the line or surface



TIP: You can add a point by hovering over the line and pressing 'p'.

To delete a point



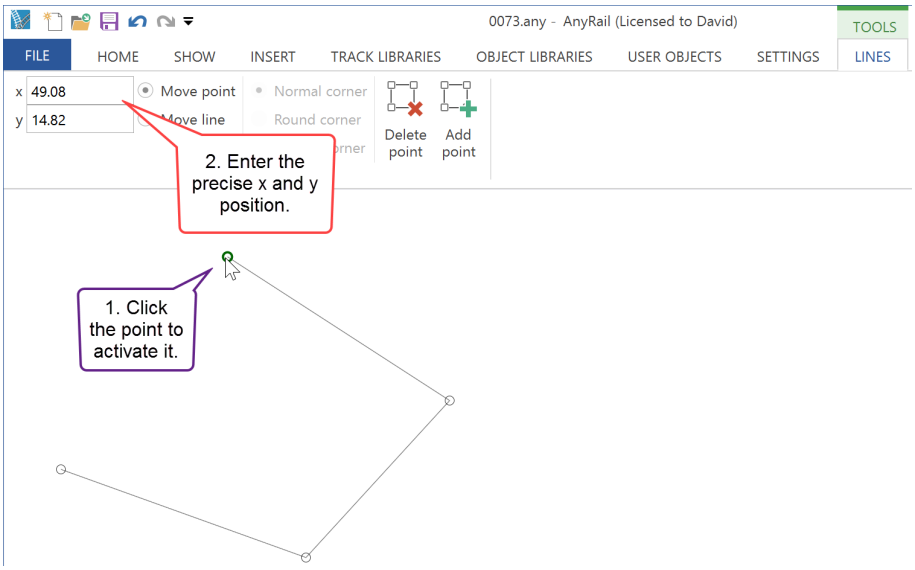
TIP: To quickly delete a point, click it and press 'Delete'.

To move a point

- Simply drag the point to move it.

Sometimes you need to precisely position a point, e.g. if you're drawing your train table.

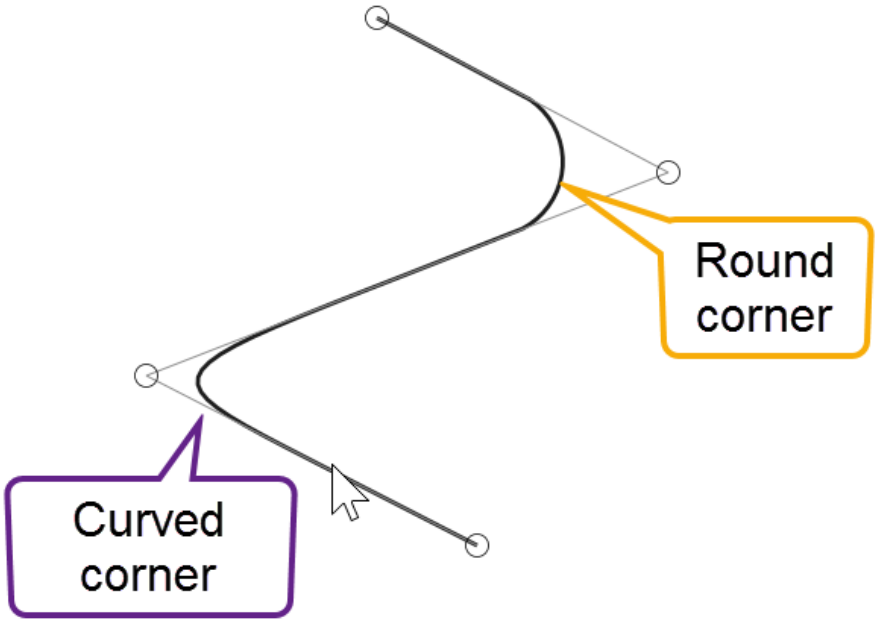
To position a point



You can create round or curved corners for points that have neighboring points. The points at the end of the line cannot be set to round or curved.

- A *round corner* is a perfect arc. A part of a circle.

- A *curved corner* is a curve halfway to each neighboring point.

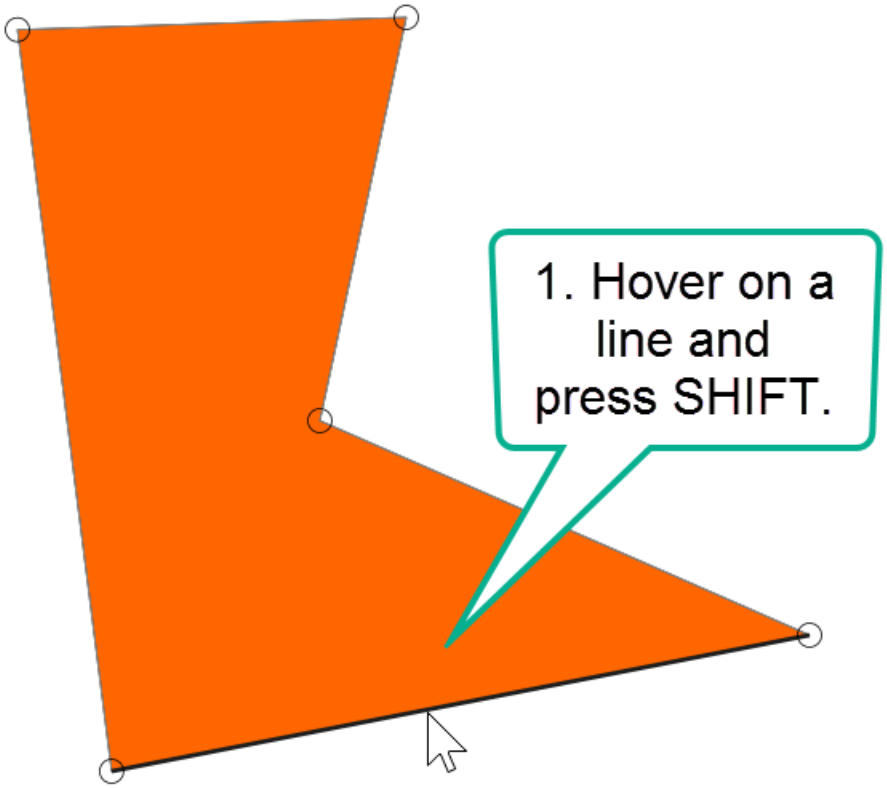


For an overview of all available functions, please see the Reference Guide 99.

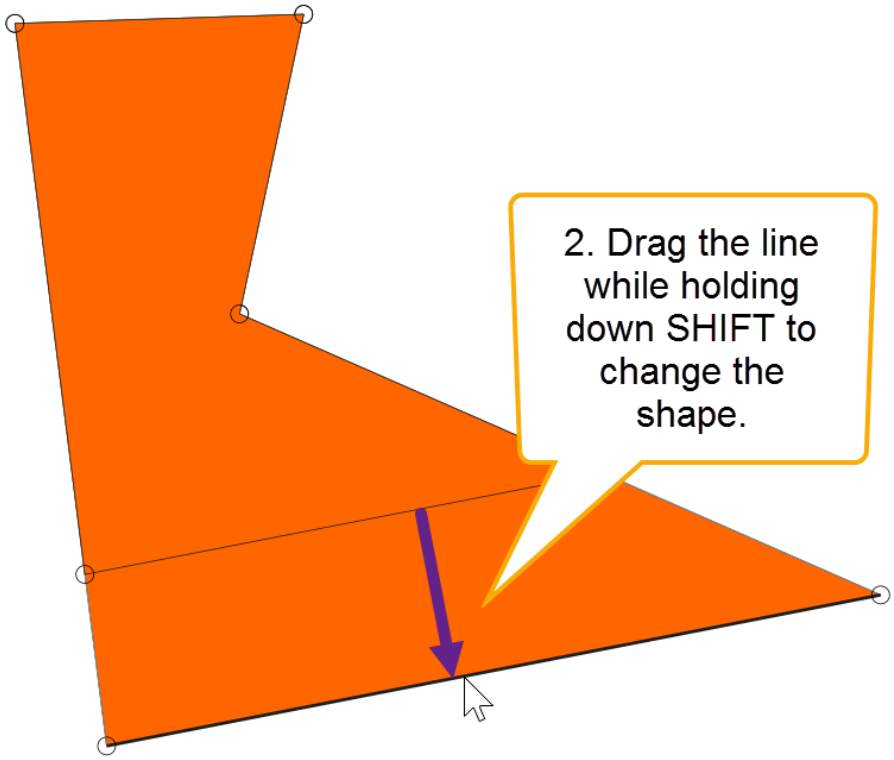
1.11.2 Manipulating surfaces

This topic covers a few special functions for surfaces.

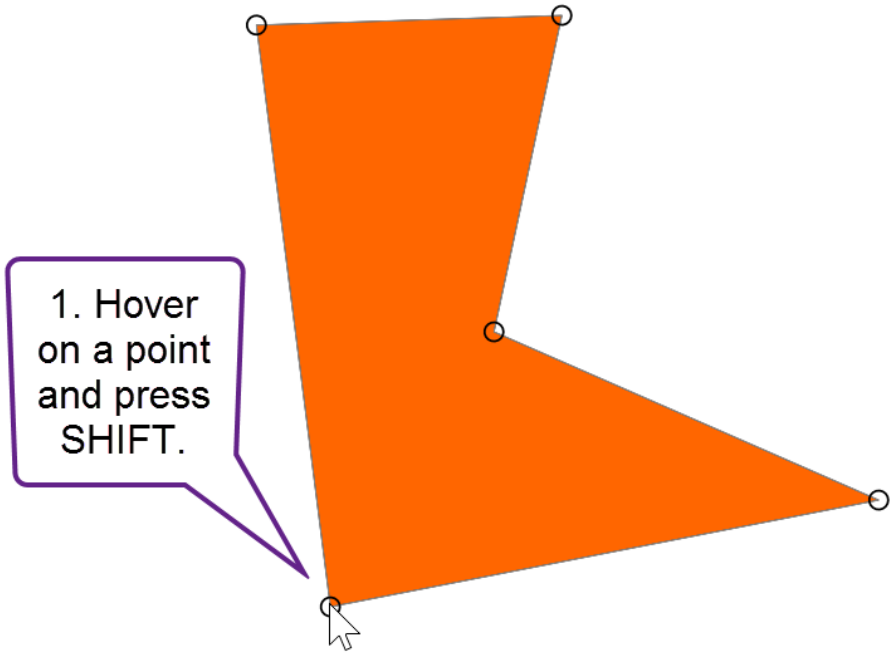
To move a line



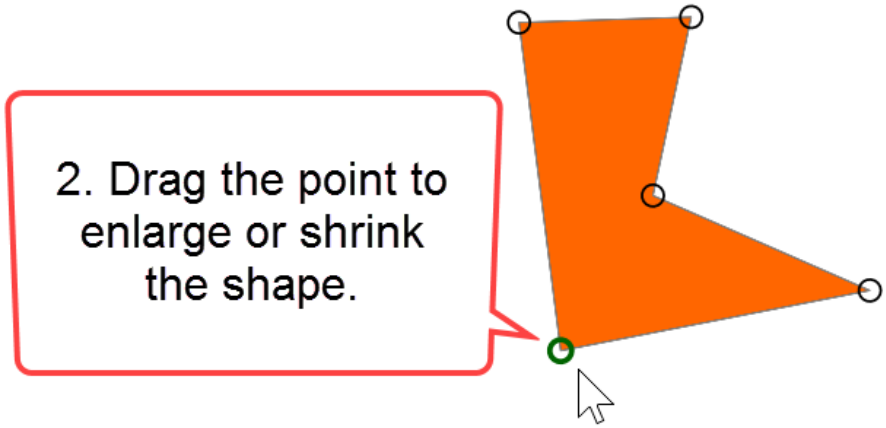
The line becomes bold.



To resize the shape



All the shape's points light up...



1.11.3 Adding Text

You can place text anywhere on your layout plan, for example to label features or make notes to yourself.

To add text

1. Find the Ribbon **INSERT** tab, and click **Add Text**.
2. Click in the work area.
3. Enter your text and press Enter.

NOTE: Depending on the scale of your drawing, the initial text may be very small. To change the size, left-click the text, and set the size in the Ribbon.

NOTE: To create a newline, use SHIFT-Enter.

To change the appearance

- Left-click on the text and select one of the options from the Ribbon **TEXT** tab.

To edit existing text

- Double-click the text.

To move the text

- Place the cursor on the text, left-click and hold to drag the text.

You can also add names to sections of track. See Working with Sections 47.

1.11.4 Adding Rulers

To add a ruler

1. Find the Ribbon **INSERT** tab, and click **Add Ruler**.
2. Click in the work area.
3. Size the ruler by dragging its end points.

To change the appearance

- Left-click on the ruler and select one of the options from the Ribbon **RULERS** tab.

To move the ruler

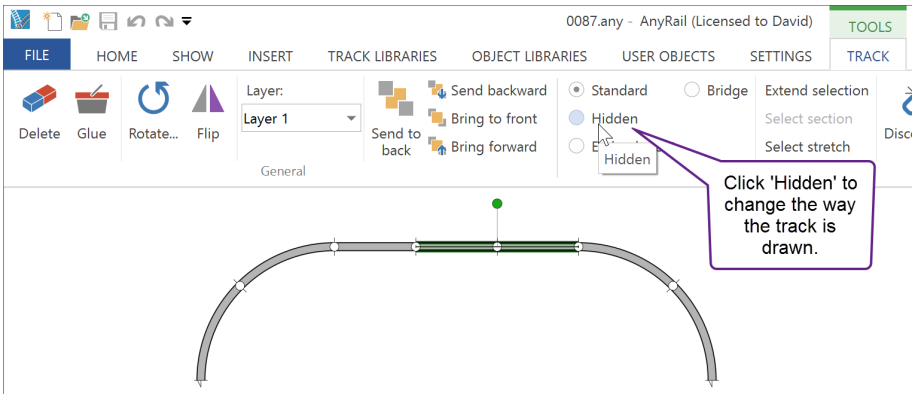
- Place the cursor on the ruler, left-click and hold to drag the ruler.

1.11.5 Marking track as hidden

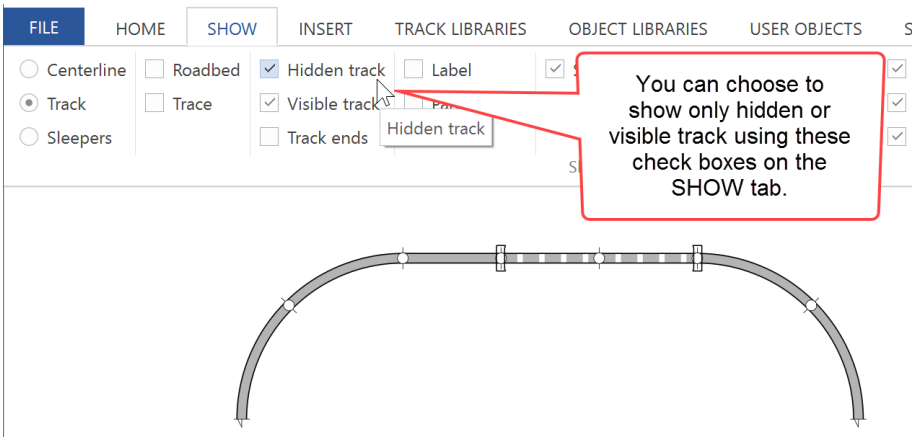
Some of your track may not be visible, for example in tunnels or fiddle yards, or underneath features such as station canopies. For this reason, AnyRail can show hidden track as a dotted line. In the 3D view, this will result in a tunnel.

To mark track as hidden

1. Select the track that is supposed to be hidden.
2. In the Ribbon **TRACK** tab, check **Hidden**.



To show hidden track

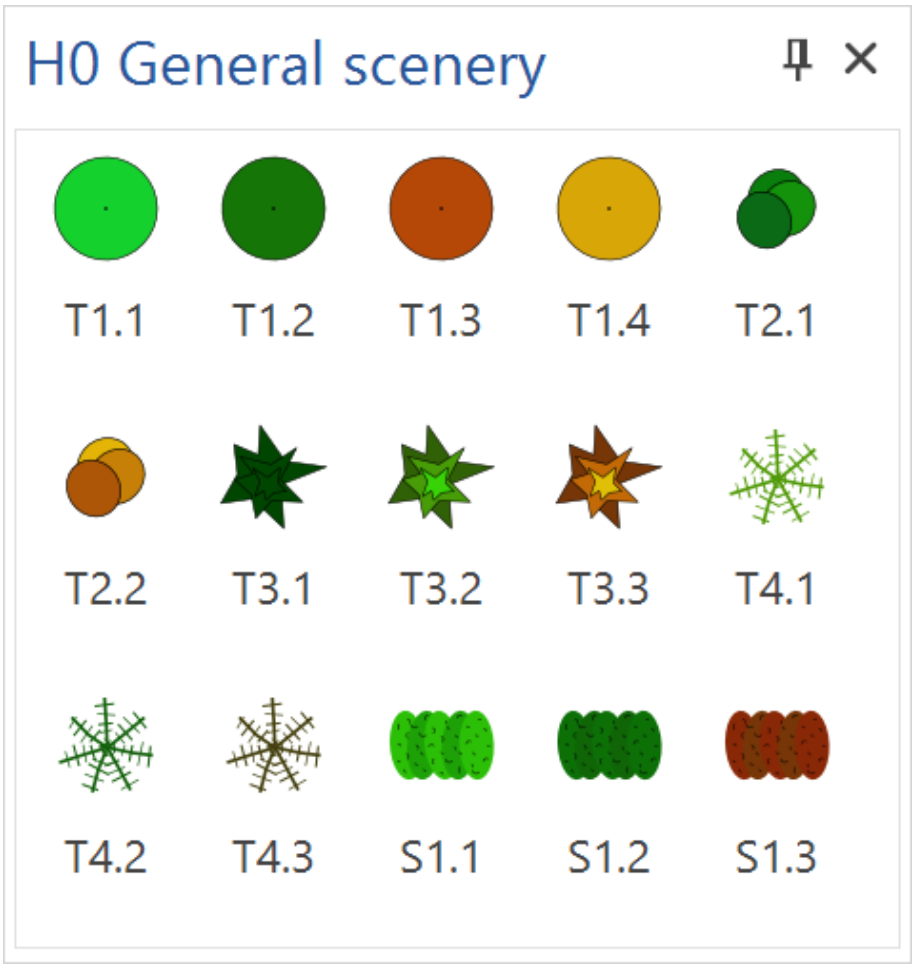


1.11.6 Predefined elements

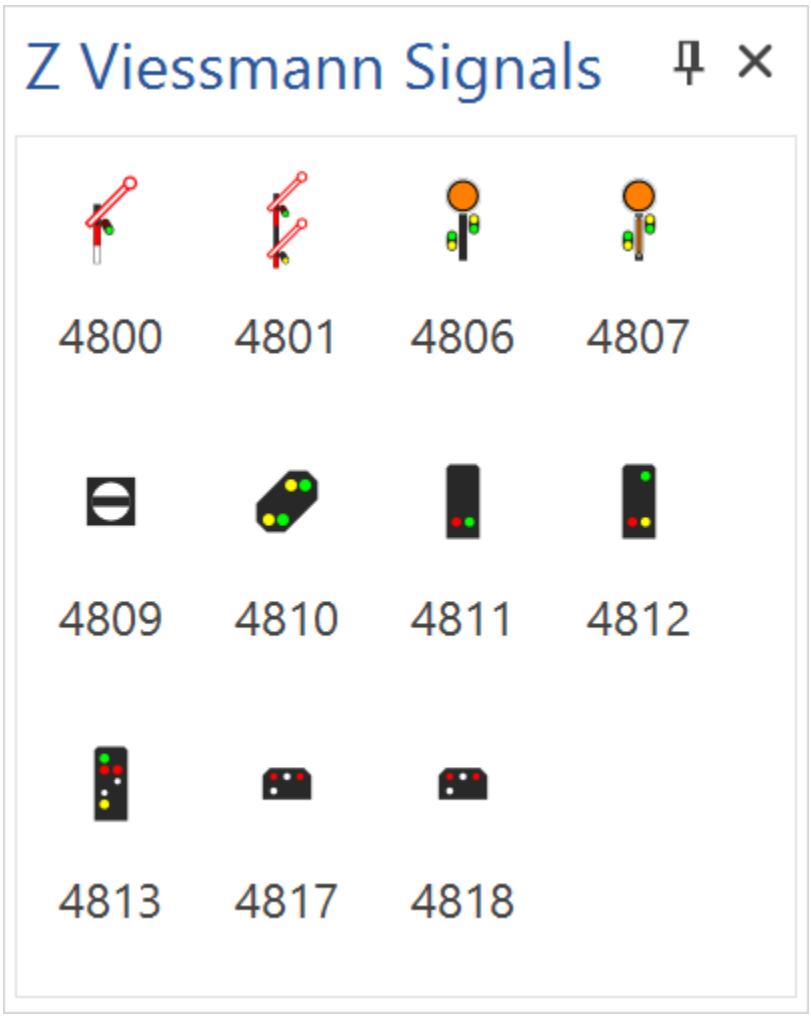
AnyRail has a number of predefined elements that you can find in the **OBJECT LIBRARIES** tab.

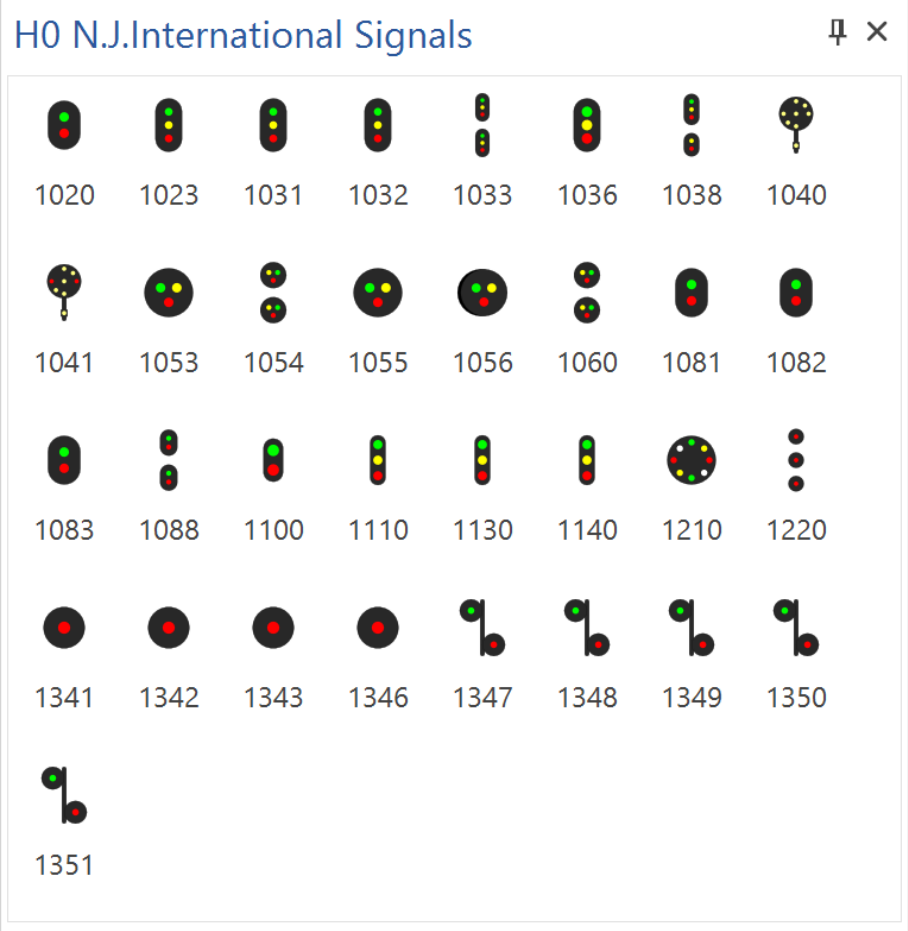
These include:

Scenery elements

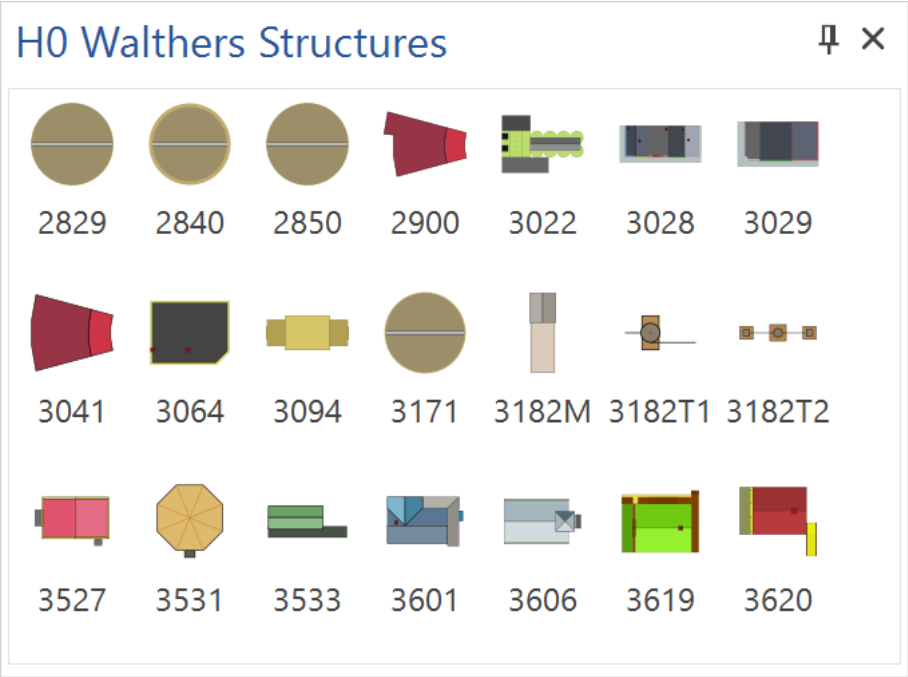


Signals





Structures



1.11.7 Groups

You can combine lines, surfaces and text into a Group.

To create a group

1. Select all the elements that should form the group.
2. Open the **GROUPS** tab that appears.
3. Click **Group**.

1.12 Layers

AnyRail layers let you show or hide different parts of your layout plan while you're working on it, e.g. to hide scenery while working on track.

It's up to you how to arrange them. A layer can contain all sorts of elements, on all heights. (Really, a layer is just an arbitrary group of elements.)

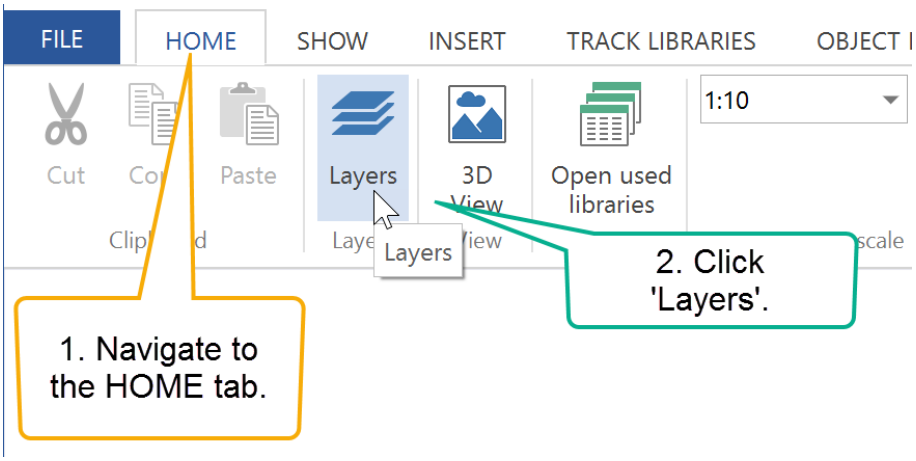
There is always one current layer. This layer is always visible. New elements are always added to the current layer.

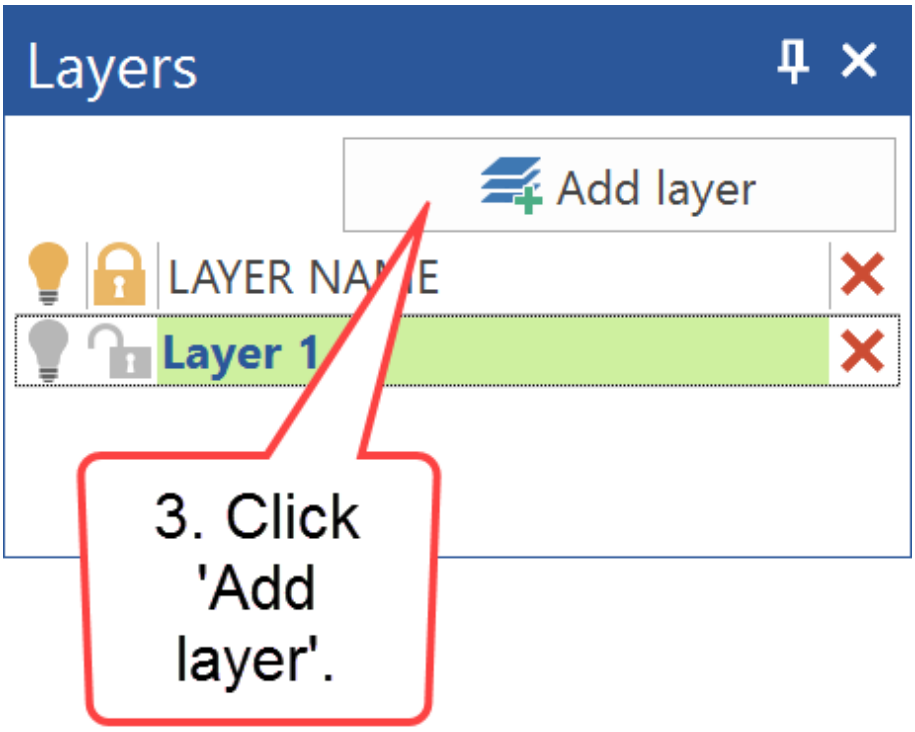
1.12.1 The Layers pane

Maintain your layers using the **Layers** pane.

From this pane, you can add, delete, and rename layers. You can also pick which layers are visible.

To add a layer





To remove a layer

- In the layers pane, click the little red cross to delete a layer.

CAUTION: Deleting a layer deletes all the elements it contains! If you press **Delete layer** by accident, you can always use **Undo** (Ctrl-Z).

To rename a layer

- In the layers pane, double click the layer name so you can edit it.

NOTE: AnyRail makes sure that each layer has a unique name.

To make a layer visible or invisible

- In the layers pane, click the lamp in front of the layer name.

NOTE: You cannot make the current layer invisible.

NOTE: The current layer is **bold and has a green background**.

TIP: Click a layer name to make it the current layer.

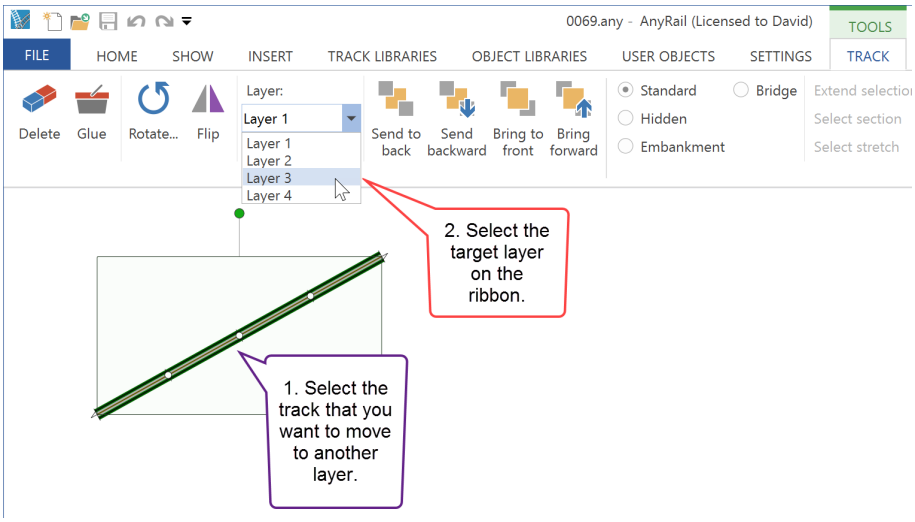
1.12.2 Moving objects to another layer

Of course, it might happen that you decide to move something to another layer. That's easy.

To move objects to another layer

1. Select the objects.
2. In the Ribbon, select the target layer.

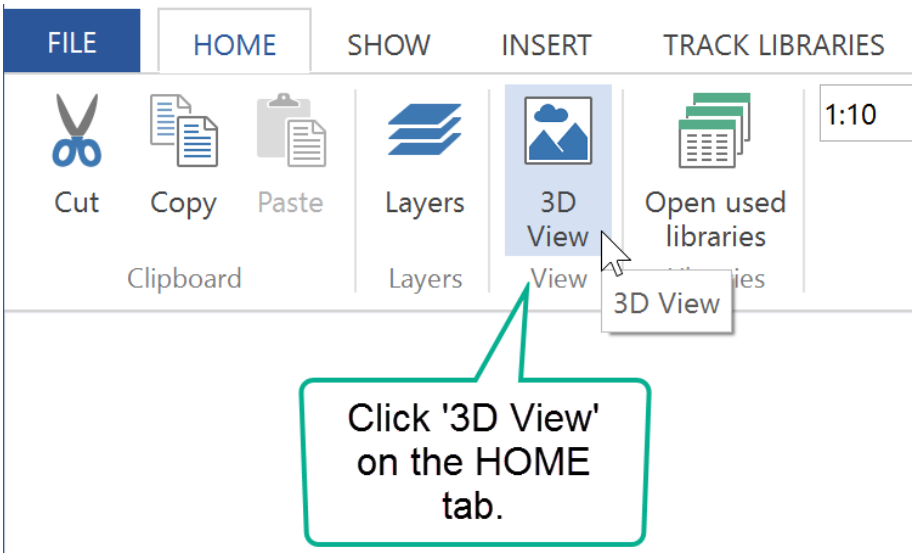
Example



1.13 3D Viewer

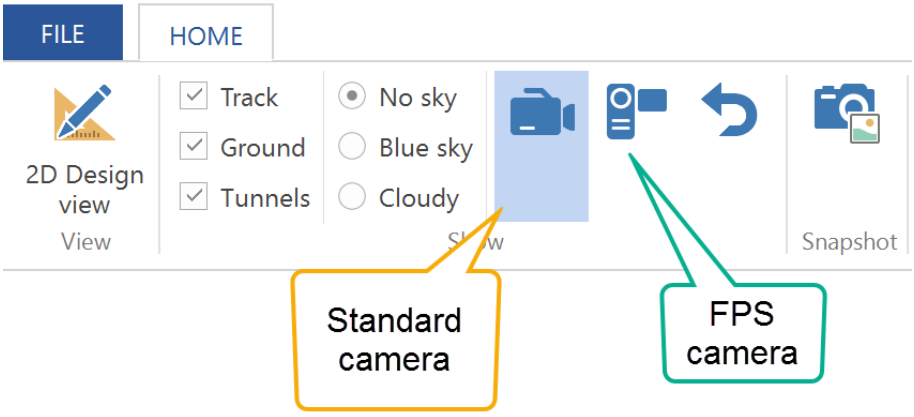
AnyRail provides a way to get a 3D impression of your design.

To go to the 3D View



1.13.1 Navigating

The 3D viewer provides two different cameras.



Standard camera

This camera allows you to quickly go around the layout using the mouse only.

The camera is aimed at one point, initially at the center of your layout, the **pivot point**.

To navigate

- Use the mouse wheel to zoom in and out
- Hold down the left mouse button and move the mouse to move around the focal point. The pivot point remains the same.
- Hold down the right mouse button and move the mouse to pan. This changes the pivot point.

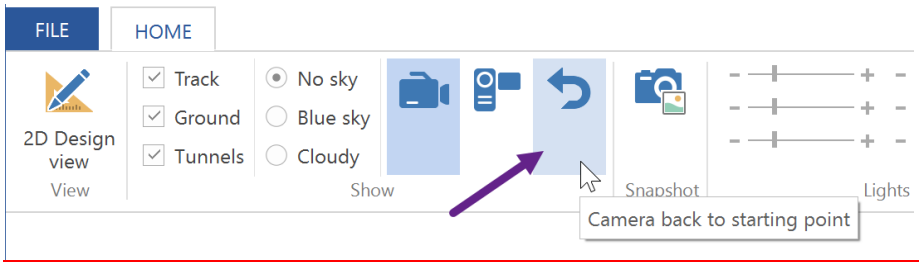
FPS camera

This camera works much like the camera in a 'First person shooter' type of game. You can move around, and just get to see whatever you look at. You need to use the mouse and the arrow keys on your keyboard.

To navigate

- Hold down the left mouse button and move the mouse to change the viewing direction.
- Use the arrow keys to move forward, backwards, and sideways. Hold down the right mouse button to double your speed.

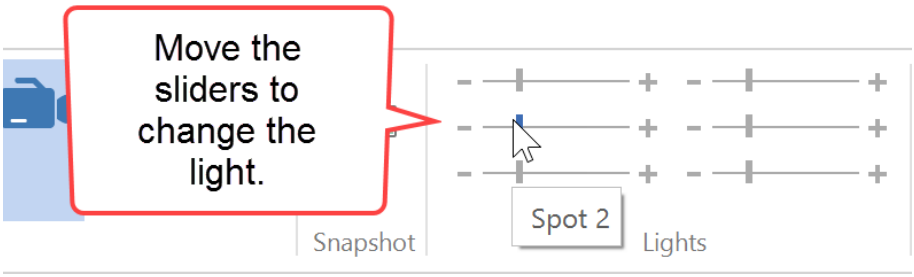
Tip: In case you get lost, click the Camera back to starting point button.



1.13.2 Lights

You can change the lights for the scene.

There is a light at each corner, a top light, and ambient light.



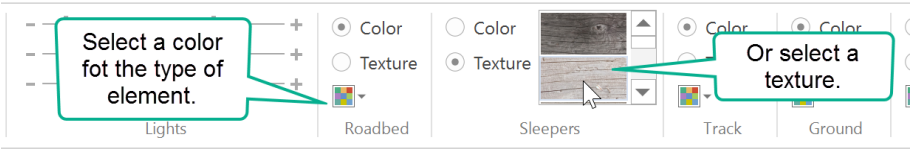
1.13.3 Colors and textures

You can change the colors of each of the elements in the 3D view.

Also, AnyRail comes with a number of preloaded textures that you can choose from.

With these you can change the looks of your layout.

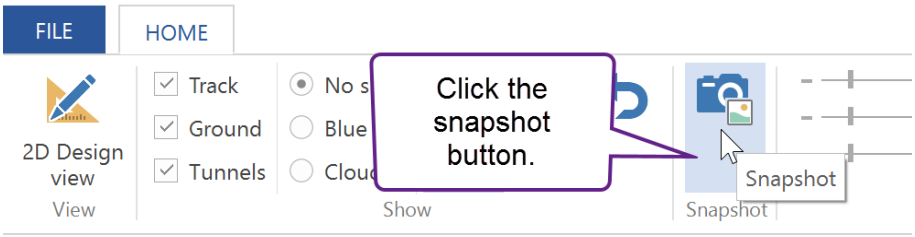
To change a texture



1.13.4 Snapshot

You can take a snapshot of the 3D view at any time.

To make a snapshot



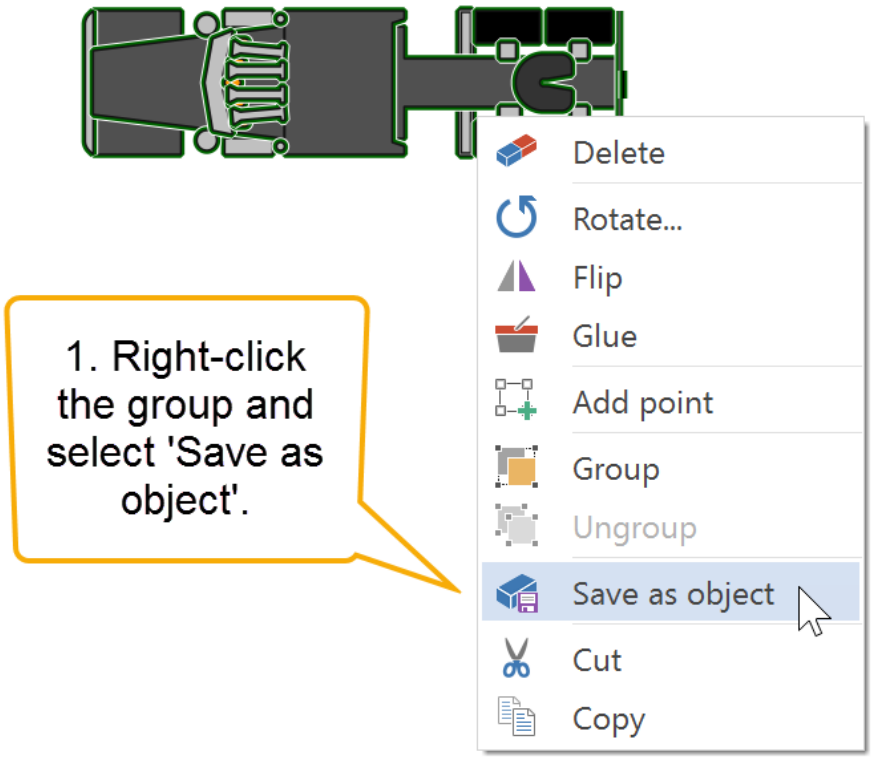
1.14 User objects

You can save your creation as a ***user object*** for later reuse. You can even share user objects with other AnyRail users.

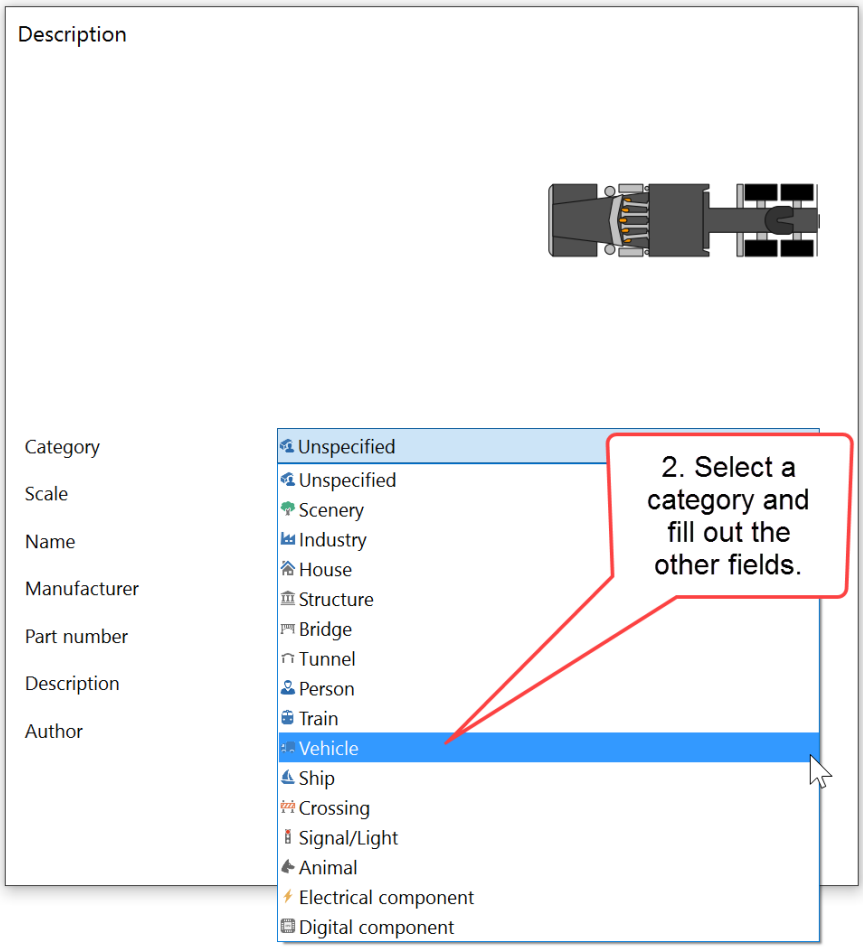
1.14.1 Creating a user object

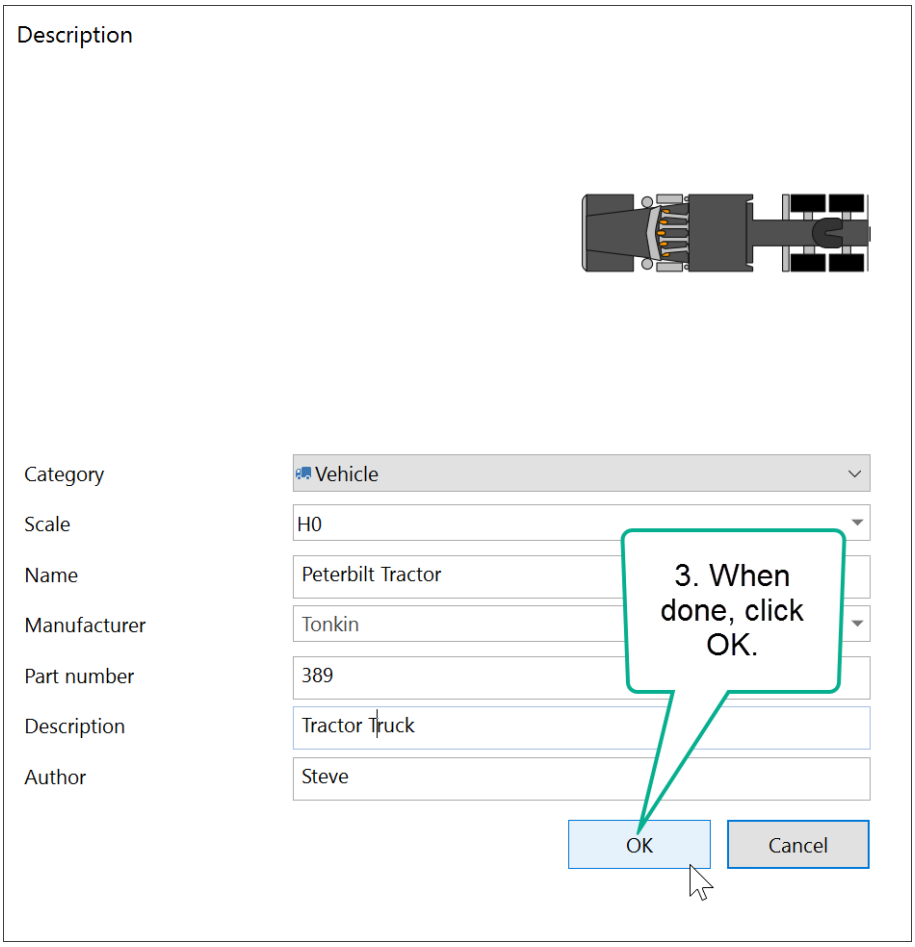
You can create a user object out of a single line or surface, or from any group 74 which can contain lines, surfaces and text.

To create a user object



A dialog appears.

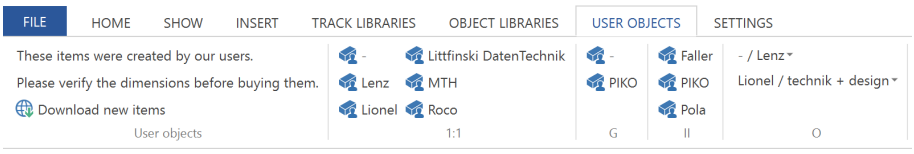




The user object is added to the correct library in the **USER OBJECTS** tab.

1.14.2 Managing user objects

To take a look at your user objects, open the **USER OBJECTS** tab.

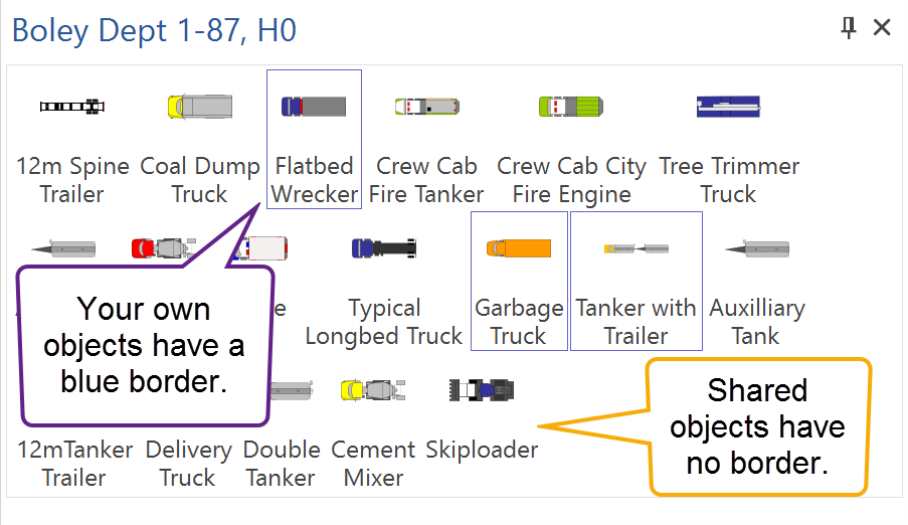


To update your user objects

1. Make sure you have a working internet connection.
2. In the **USER OBJECTS** tab, click **Download new items**.

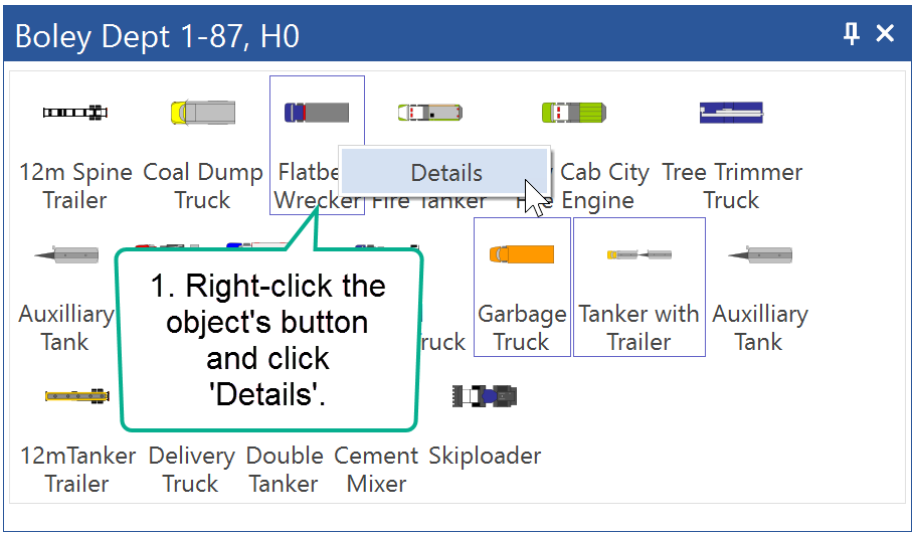
To open a library of user objects

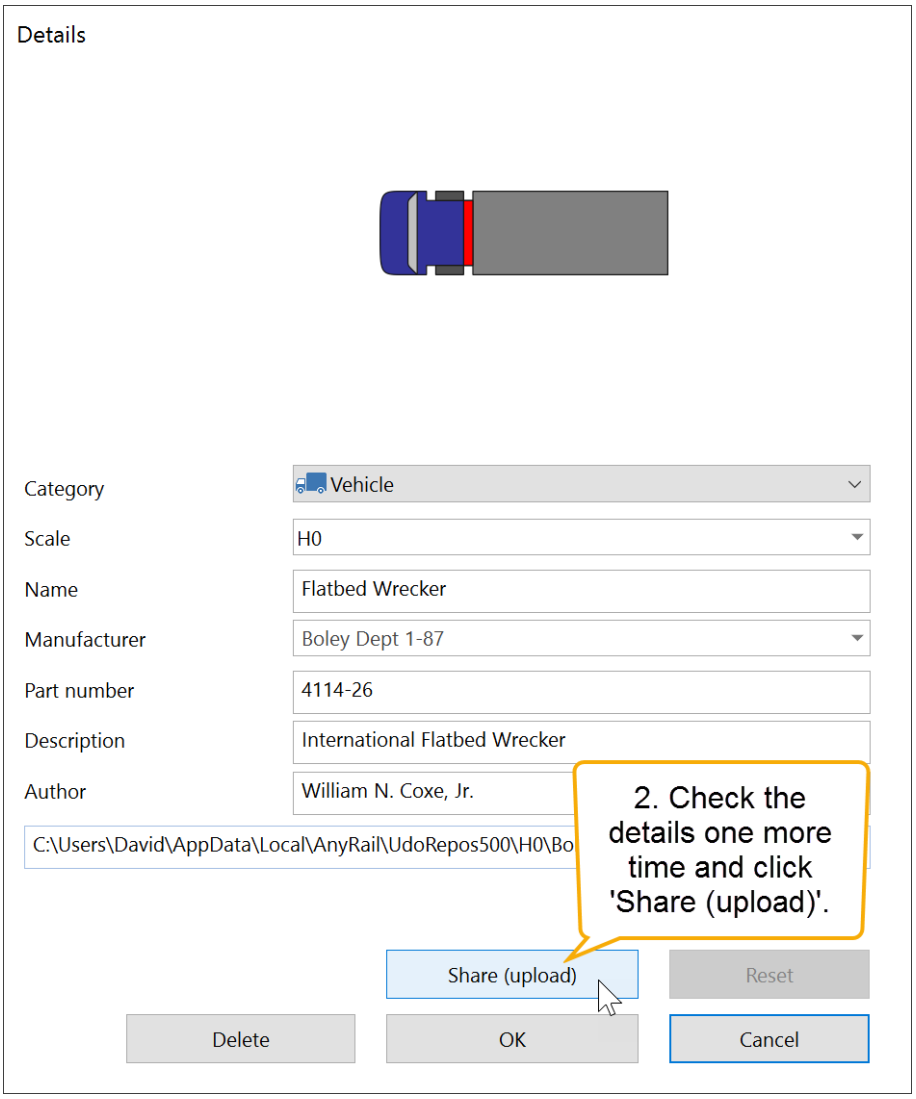
- Check the library's check box.
  The user objects are displayed just like the regular track items.



If you've created an object you want to share, you can upload it to the AnyRail servers.

To share a user object





NOTE: Other people won't see your objects right away - we have to approve them first.

1.15 Finishing up

Once you've completed the design, you'll need to get it in some sort of usable form. It's simplest just to print the layout. However, you can also save parts of it as pictures – useful for emailing your friends or to publish your track plan on a forum.

In addition, you can view lists of materials and sections.

1.15.1 Saving your work

You can save AnyRail design files just as you would with any other Windows software. You might also find **Save as** useful for recording different stages of your design.

To save your file

- From the **FILE** tab, select **Save**.

To save your file with a new name and location

- From the **FILE** tab, select **Save As**.
  A standard file window opens, allowing you to save a copy of your file. The old one is untouched.

Auto-save

AnyRail auto-saves your work every 10 minutes in a separate folder. If AnyRail closes in a normal way, these auto-saved files (except for one) are deleted to preserve disk space.

In case your computer crashes, or if AnyRail terminates in an unexpected way, you can find a recent copy in the **Autosave folder**.

To find an auto saved file

1. Open the **FILE** tab.
2. Select **Help**.
3. Click the button tagged **Autosave Folder**.

NOTE: The most recent file you find is probably your best choice.

1.15.2 Print preview

Color ink is expensive! Also, it can be annoying to wait while a design

prints out, only to discover that the settings were not quite right. For this reason, AnyRail enables you to see what your printout is going to look like.

To preview your printout

- From the **FILE** tab, click **Print**.
  AnyRail displays a preview of your printout.

1.15.3 Printing your design

To print your design

1. From the **FILE** tab, select **Print**.
2. Review your settings and click the **Print** button.

The design prints at the specified scale, using several pages if required.

NOTE: Printing a large layout in a large scale takes a lot of processing power and resources. Each page is a picture, so it might take a while depending on your computer.

TIP: To print your layout to real size, set the view scale to 1:1. However, before clicking OK, check the number of pages it will take!

1.15.4 Generating pictures

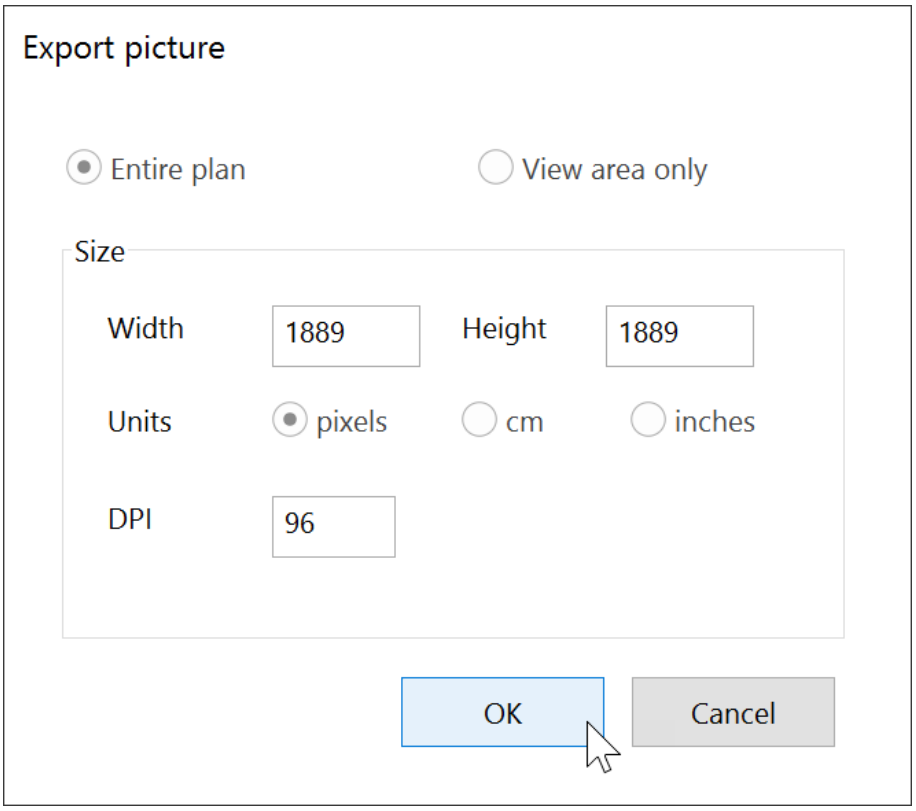
You can either create a picture of whatever is in view, or of the complete plan.

The resolution of the resulting picture depends on the view scale that you have set.

If pictures get too large, choose another view scale.

To generate pictures (.gif, .bmp, .jpg .tiff or .png)

1. If required change the view scale. The scale slider is in the lower right corner of the status bar.
2. Use the scroll bars to get the exact picture you want if you need to crop the layout.
3. From the Ribbon **FILE** tab, select **Export As**, then in the right pane, click **Picture**.
   A window appears:



4. Click **OK**.
   A standard File window opens.
5. Save the file in the required graphics format.

WARNING: THIS IS NOT THE SAME AS SAVING YOUR TRACK PLAN! These pictures cannot be reloaded into AnyRail.

1.15.5 Generating a 3D file

You can generate a 3D file that can be imported into most 3D drawing programs.

To create a 3D File in stl, dae (Collada), ply or obj format

1. Open the **FILE** tab.
2. Select **Export as**.
3. Select **3D File**.
4. Type or select a file name, and press **Save**.

1.15.6 Generating a TrainPlayer file

You can generate an intermediate file that can be imported by TrainPlayer, a program that simulates running trains on a layout. For more information, please go here.

To create a TrainPlayer file

1. Open the **FILE** tab.
2. Select **Export as**.
3. Select **TrainPlayer export file**.
4. Type or select a file name, and press **Save**.

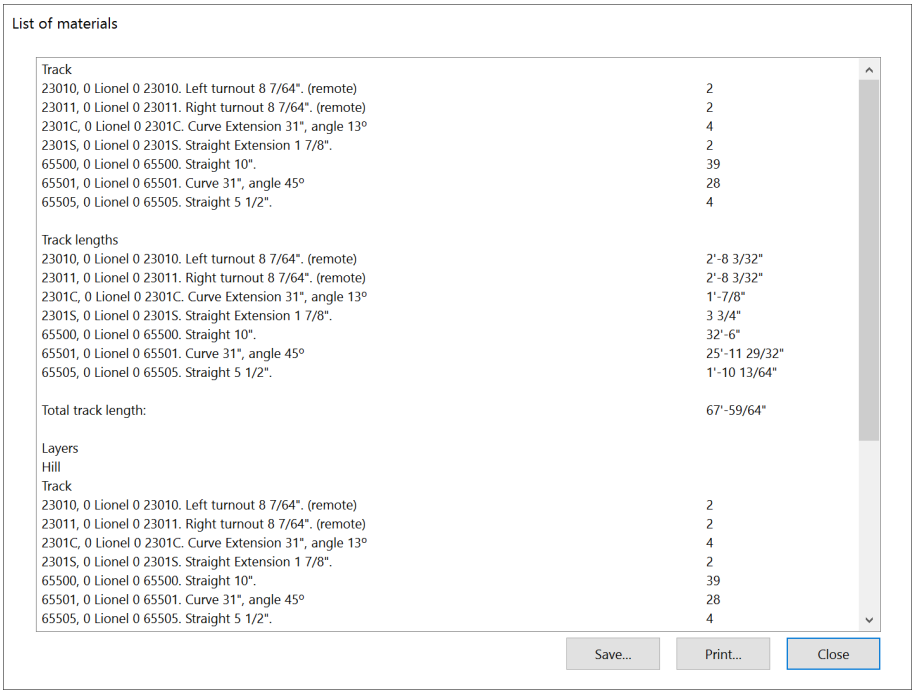
1.15.7 Generating a list of materials

The list of materials contains all the track you've placed on the layout. It also shows the total track length, and the track length per track element.

To generate a list of materials

1. From the Ribbon **FILE** tab, select **Info**.
2. Here, select **List of materials**.

The list of materials opens:



TIP: Copy and paste the list into a spreadsheet for further processing.

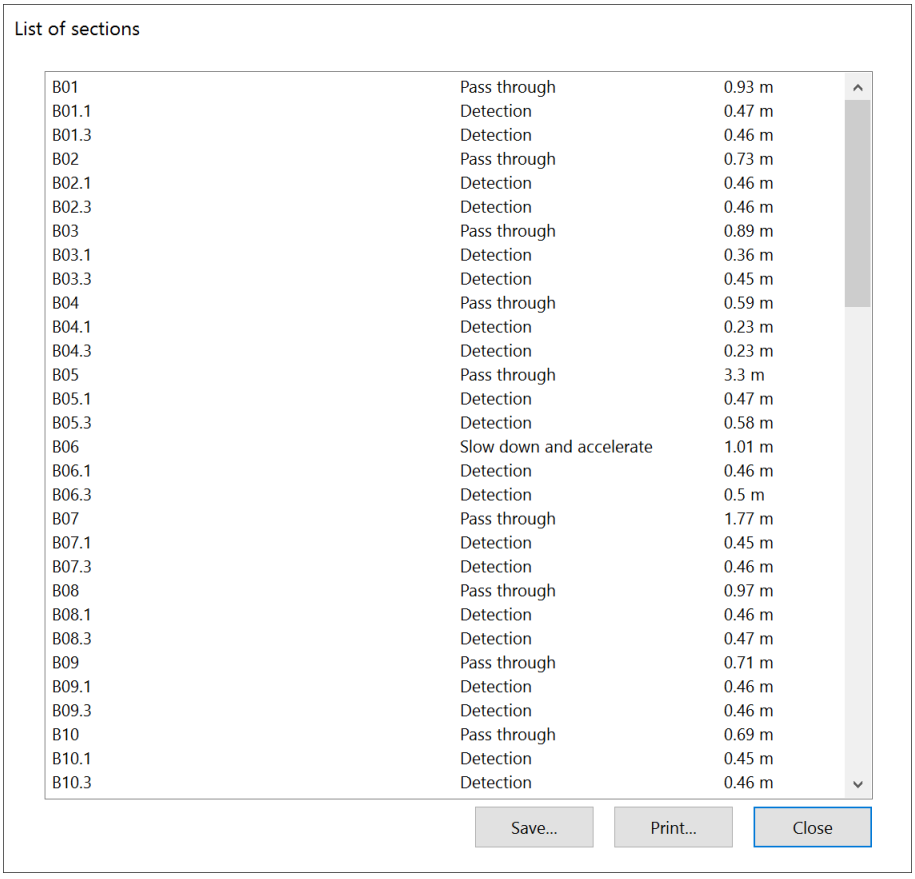
1.15.8 Generating a list of Sections

The list of sections is very useful when assigning occupancy detectors.

To generate a list of sections

1. From the Ribbon **FILE** tab, select **Info**.
2. Here, select **List of sections**.

The List of sections opens:



TIP: Copy and paste the list into your spreadsheet program for further processing.

1.16 Licensing

With the trial version, you can freely use AnyRail for small layouts of up to 50 elements.

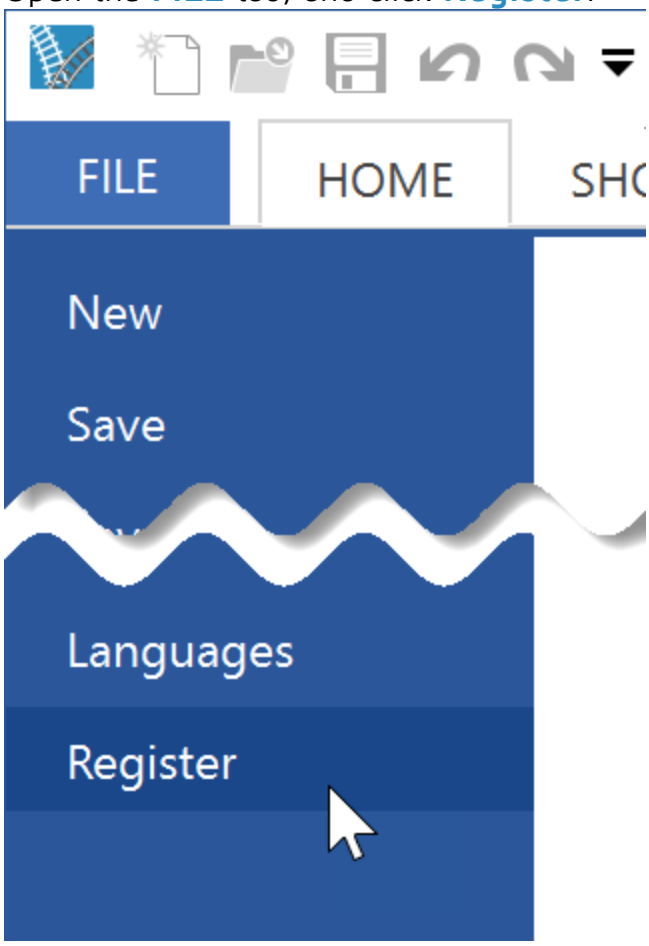
If you want to go beyond that, you need to buy a license key that unlocks the software and lifts this restriction.

To register, first buy a license on our website.

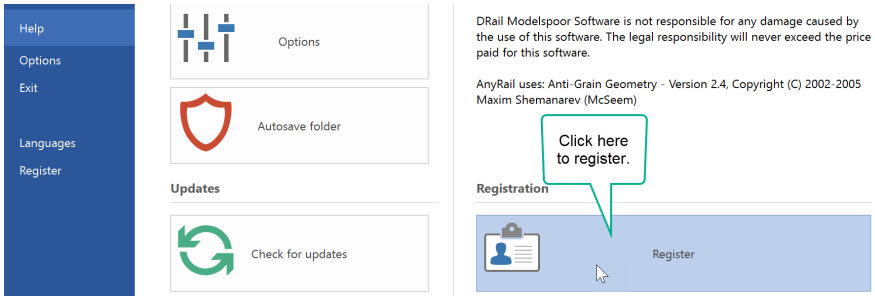
You will get an email stating your registered user name and license key.

To register AnyRail

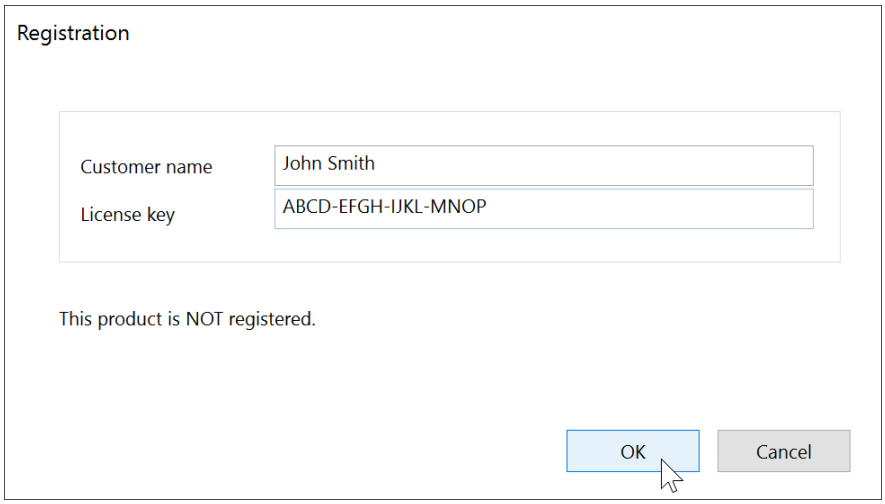
1. Open the **FILE** tab, and click **Register**.



or: Open the File tab, and select Help

2. 

3. Copy and paste the necessary information from your registration email.



4. Click **OK**.

NOTE:You may use your license on multiple computers, as long as you are the one using the software.

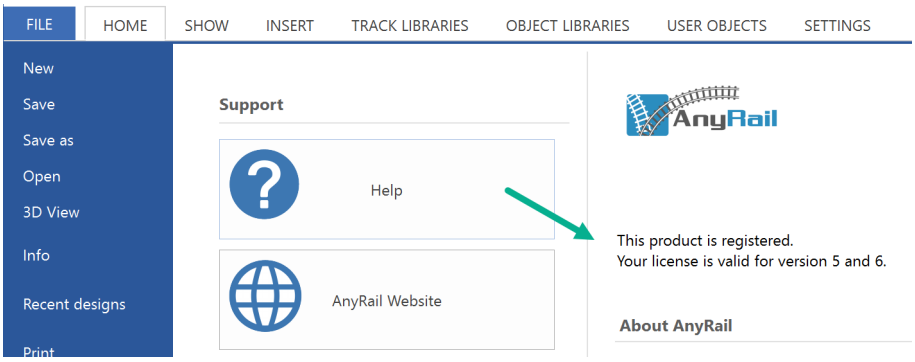
1.16.1 Updates and upgrades

Whether or not you have a license for AnyRail, you can always update your installation for free. Updates can be recognized by a difference in the minor version number, e.g. 6.**15**.0 to 6.**19**.0, or in the patch number 6.15.**0** to 6.15.**1**.

Upgrades can be recognized by a difference in the major version number, e.g. **6**.27.0 to **7**.1.0. Whether upgrades are free depends on your current license.

To check the current license

- Open the **File** tab, and select **Help**.

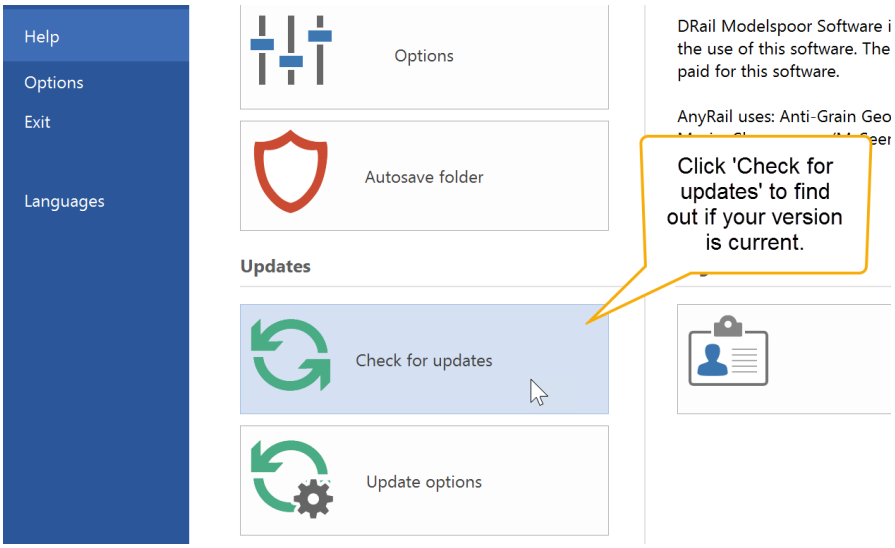


AnyRail indicates for which major versions your license is valid.

Of course, AnyRail will never overwrite an existing licensed version. If you install a newer version for which you do not have a license, the new version will be installed next to the old version.

To check for updates and upgrades

- Open the **File** tab, and select **Help**.



AnyRail automatically contacts us to see if a newer version is available. If so, it will ask you whether you want to update.

Update options

Depending on your settings, AnyRail regularly checks for updates automatically

To view or change the update options

1. Open the **File** tab, and select **Help**.
2. Click **Update options**.

2 Reference Guide

This part of the user manual lists each AnyRail feature and function.

TIP: If you're new to AnyRail, please read the Getting Started 5 first.

2.1 Features

This chapter lists those AnyRail features that need some extra explanation.

2.1.1 Glue

You can "glue" certain elements, such as track and predefined

elements, so that you can't accidentally move them.

To glue track

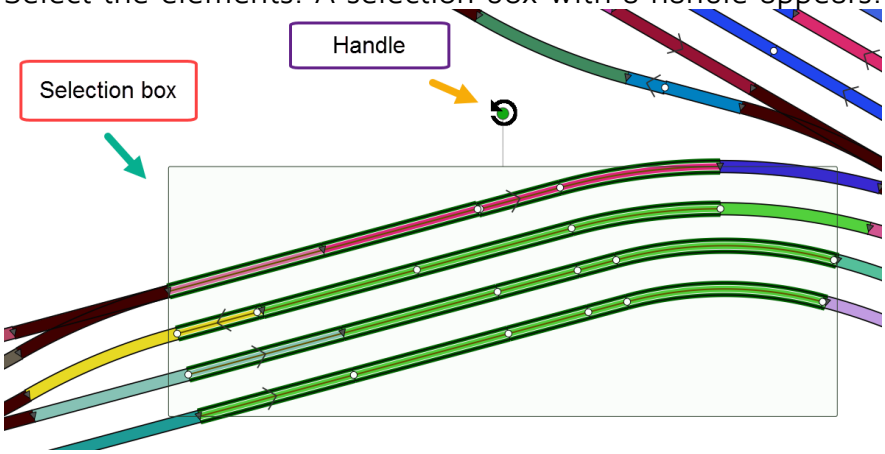
- Right-click the element, and select **Glue**.

2.1.2 Rotate

Any element or selection of elements can be rotated.

Method 1

1. Select the elements. A selection box with a handle appears.

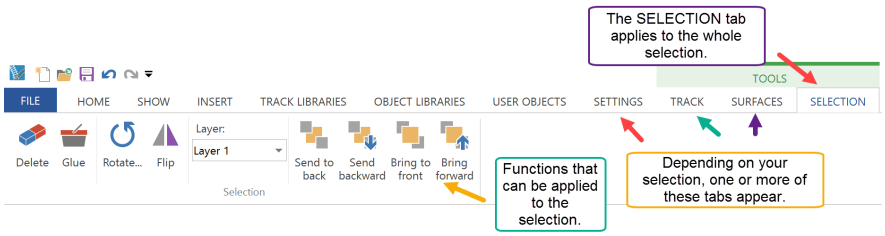


2. Use the handle to rotate the selection with the mouse.

NOTE: If the handle is red, the selection cannot be rotated. Usually this is caused by glued items.

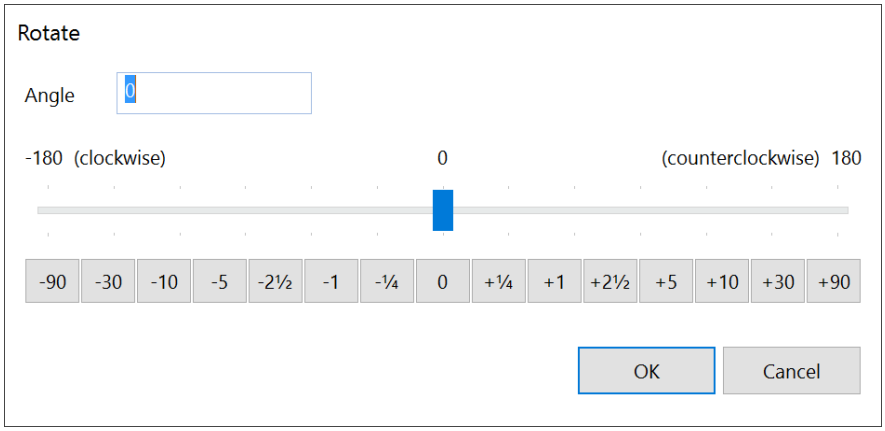
Method 2

1. Select the elements. Depending on what you select, various extra tabs appear on the Ribbon:



2. Click **Rotate**.

   A new window appears:



3. Enter an angle or use the slider. Your selection rotates as you change the angle.
   You can also use the buttons to rotate a certain number of degrees. The 0 button resets the rotation to the start position.

4. Click **OK**.

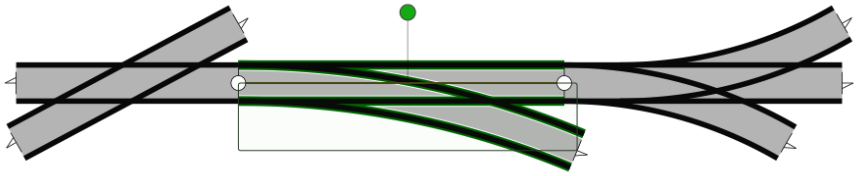
Using the slider will change the angle in full degrees. However, the angle may be changed an arbitrary amount by entering a value in the edit box, i.e. 23.7.

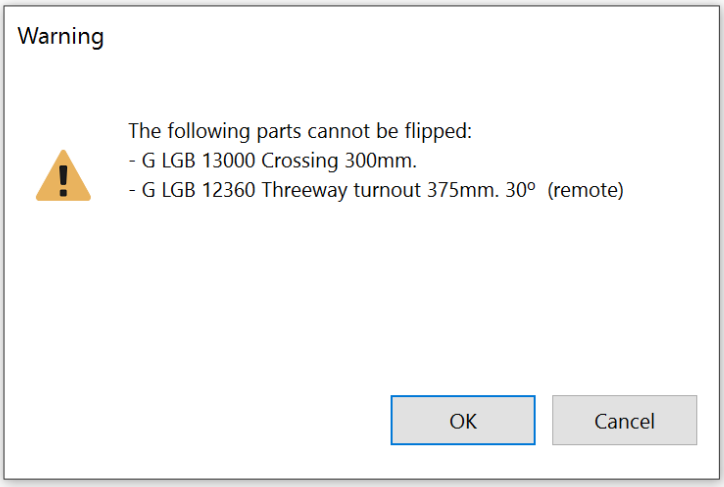
2.1.3 Flip

Some elements can be "flipped" (i.e. turned into a mirror image of themselves). You can use this feature to invert your complete layout if you wish. AnyRail will automatically replace each element with its mirrored counterpart. AnyRail shows a list of elements that cannot be mirrored.

To flip an element or a selection of elements

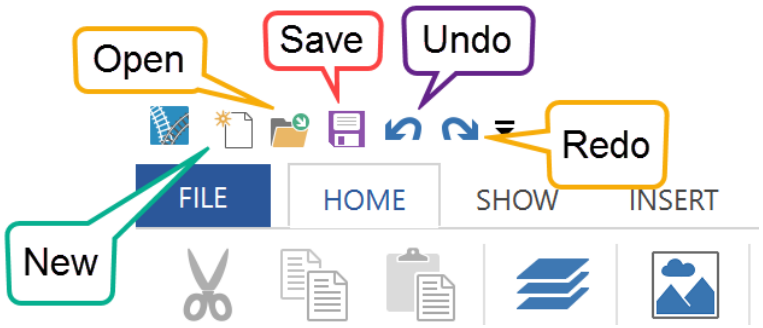
1. Select the elements to flip. For track, all connected track is flipped automatically when a subselection of it is flipped.
2. In the Ribbon, select **Flip**.
   The elements are mirrored. If the action cannot be completed, a list of problem elements is displayed. These elements don't have a mirrored counterpart.





2.2 The Quick Access Toolbar

The Quick Access Toolbar is the list with small icons at the top left of the window.

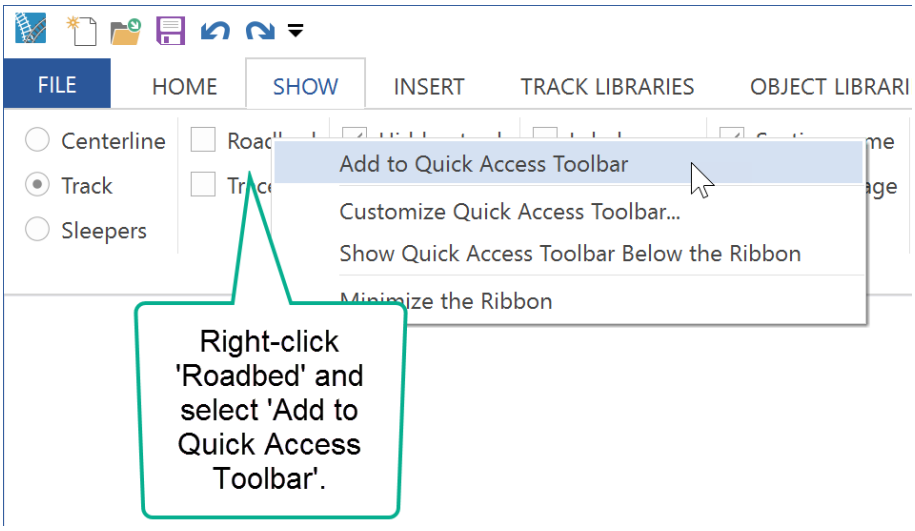


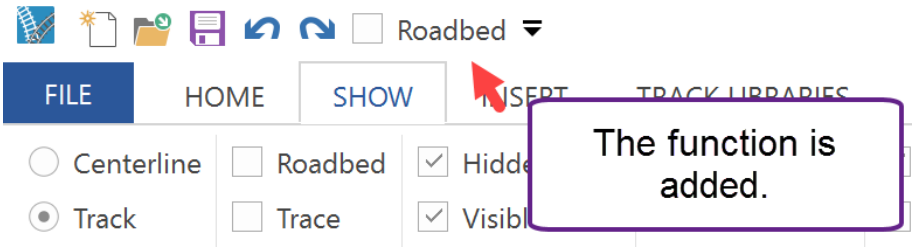
Don't worry if you can't remember the small icons! If you hover over them you'll see a tooltip.

To change to Quick Access Toolbar

1. Right-click the function you want to add to the Quick Access Toolbar.
2. Select **Add to Quick Access Toolbar**.

Example





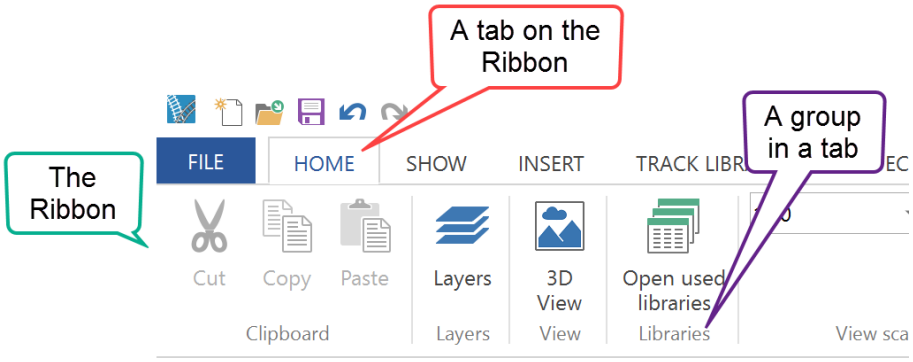
TIP: To reset AnyRail to its original settings, shut it down and start it again while holding SHIFT down.

2.3 The Ribbon

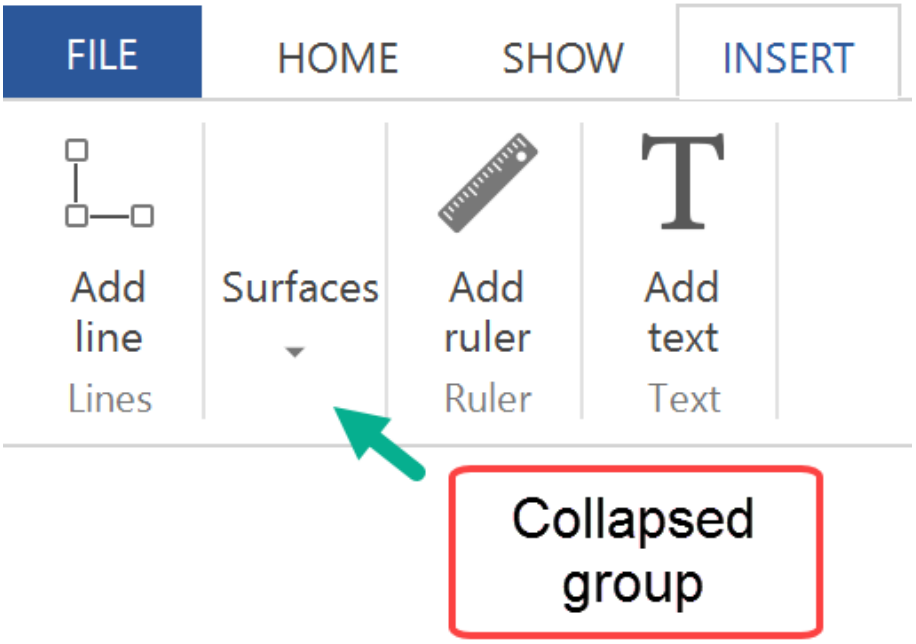
All functions available in AnyRail can be accessed through the Ribbon.

The Ribbon is the part at the top of the window where the functions are displayed.

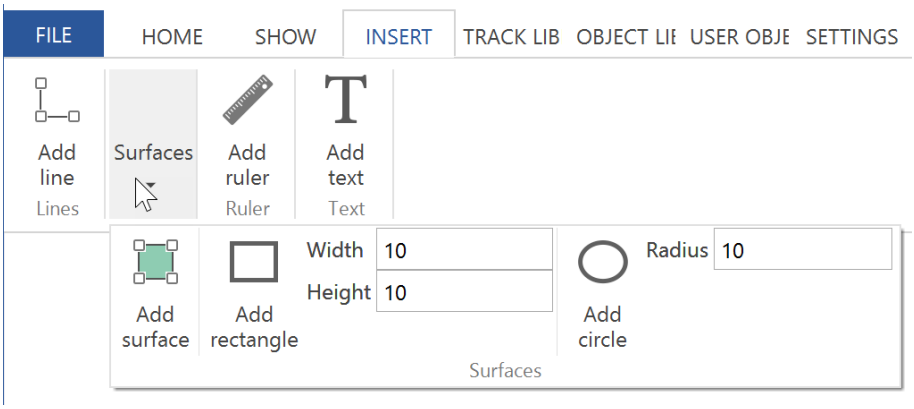
The Ribbon is organized into tabs. A tab is organized into groups.



When you resize the AnyRail window, the Ribbon resizes as well. Groups might collapse.

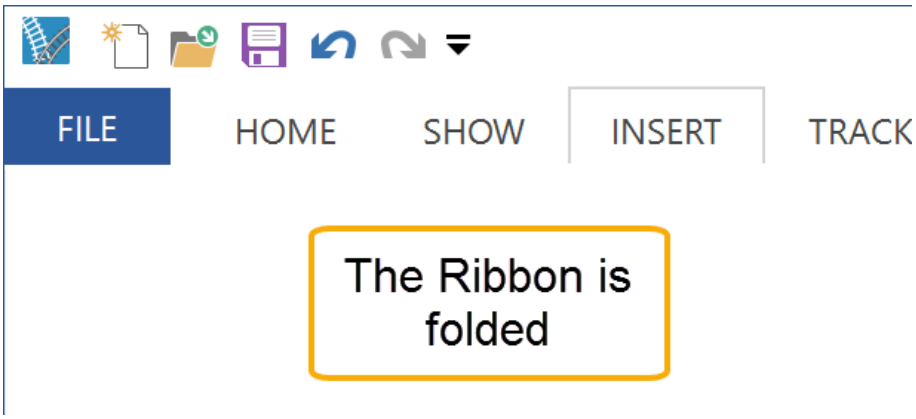


To open a collapsed group, simply click the little arrow on it.



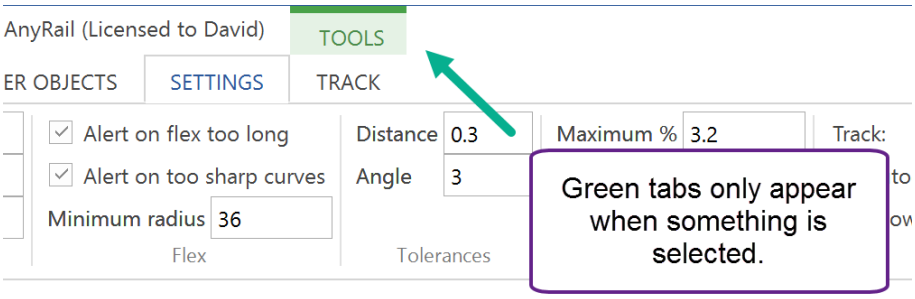
Sometimes, the Ribbon takes too much space. To fold it, double-click one of its tabs (not the **FILE** tab).

Double-click a tab again to unfold it.



Tabs

Not all tabs are visible at all times. The tabs to work on track, lines, rulers, etc. only appear when you have selected these elements and are highlighted in green.



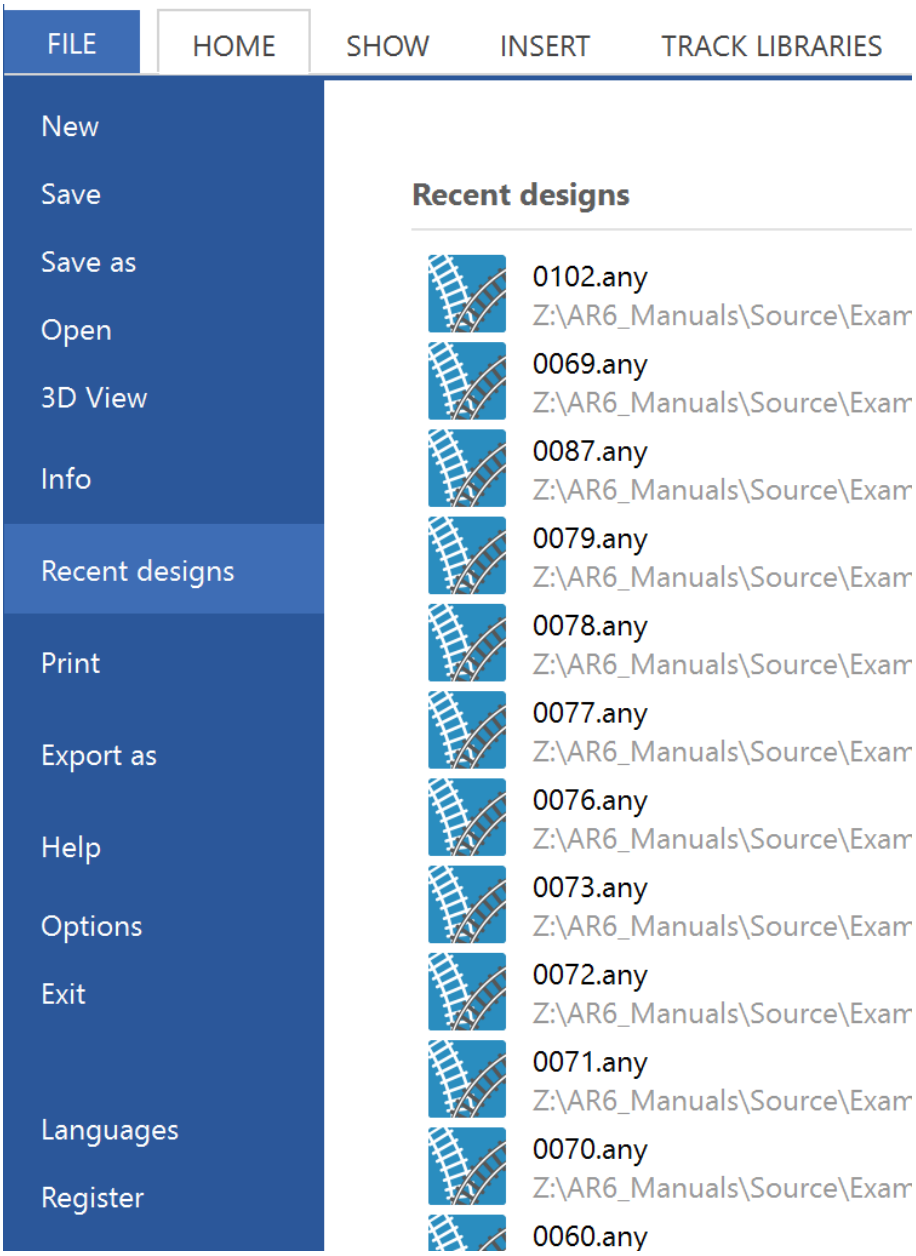
2.4 Ribbon Tab Reference

In the following, each function on each tab is listed and explained.

2.4.1 FILE tab, 2D view

This in fact is not a real tab. It is the backstage button.

Click it to open.



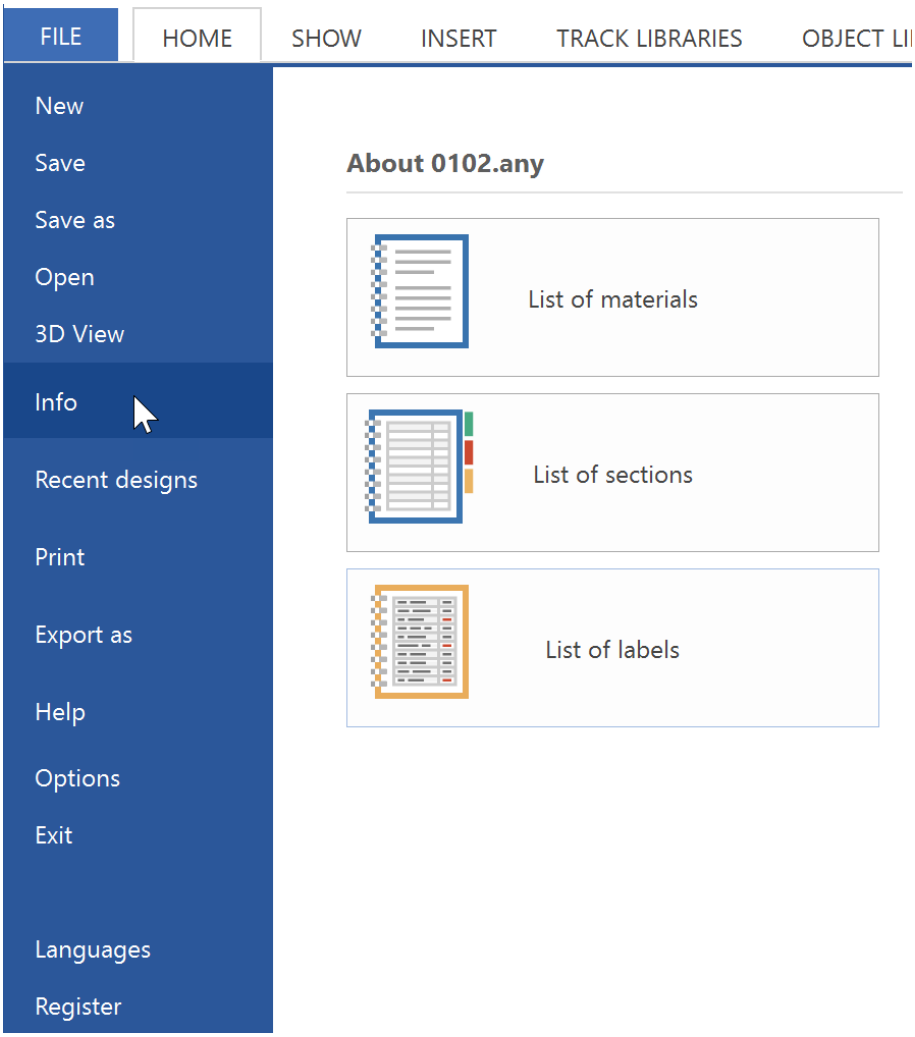
New Start a new layout.

Save Save the layout.

Save As	Save the layout by a new name.
Open	Open an existing layout from disk.
3D View	Switch to a 3D view.
Info	Info on your current design.
Recent designs	The files you have opened most recently.
Print	Print the layout or change print settings.
Export as	Export the layout in various formats.
Help	Help, updates, and registration.
Options	Program options.
Exit	Quit the program.
Languages	Change to another language.
Register	Register the software with your license key. Only available when you've not already registered.

Info

Click **Info** to find these options.



List of materials The list of all elements used in your track plan.

List of sections The list of sections you defined for your track plan.

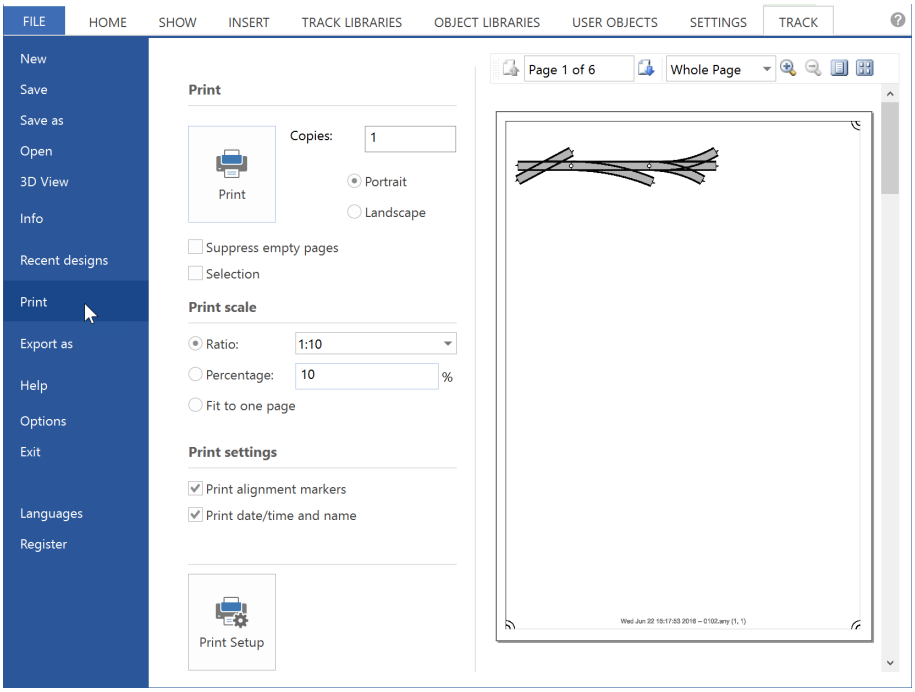
List of labels The list of labels you gave to items, such as turnouts.

Recent designs

Click **Recent designs** to see the files you recently used.

Print

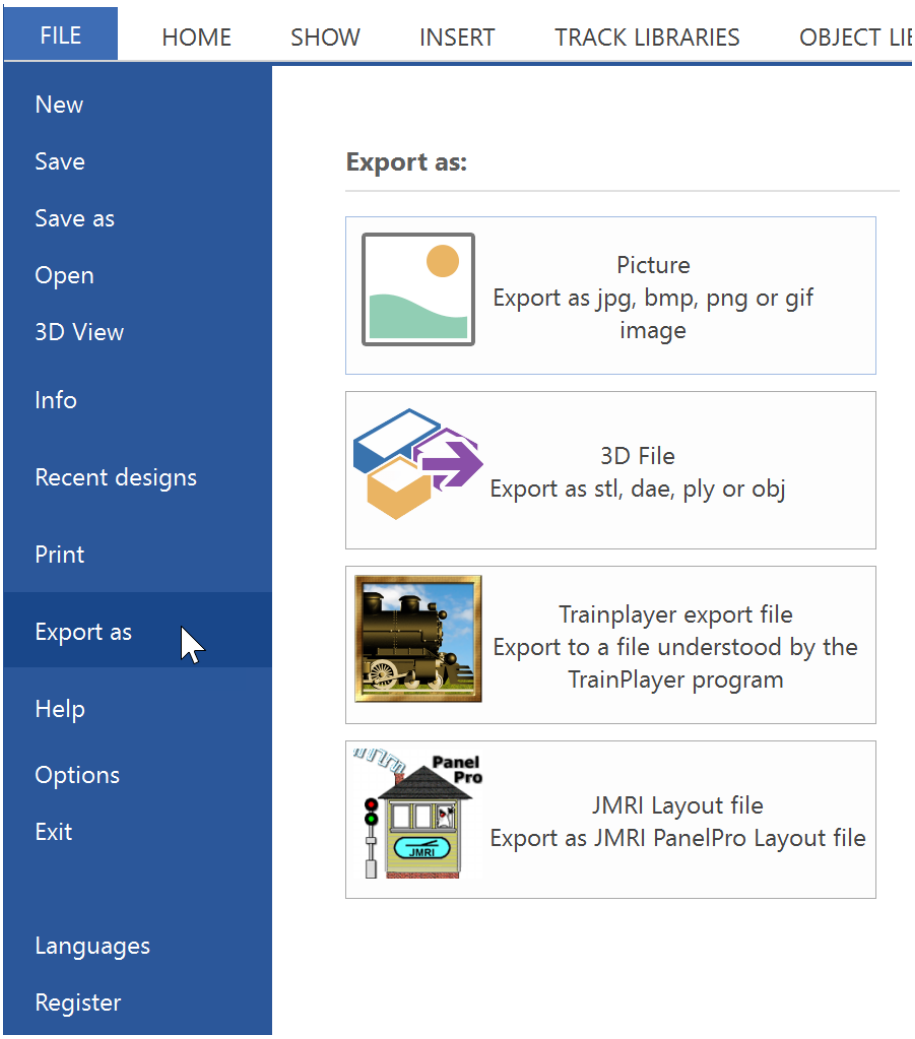
Click **Print** to find these options.



Print	Print the plan at the current scale.
Copies	The number of copies to print.
Portrait/Landscape	The paper orientation.
Suppress empty pages	Do not print pages with nothing on it.
Selection	Print only what is selected in the plan.
Print scale	Set the print scale in various ways.
Print alignment markers	Print markers on the page corners to make it easier to align them.
Print date/time and name	Print this info on each page.
Print Setup	Setup printer, paper size, etc.

Export as

Click the arrow on the **Export As** button to find these options.



Picture Create a picture of your plan.

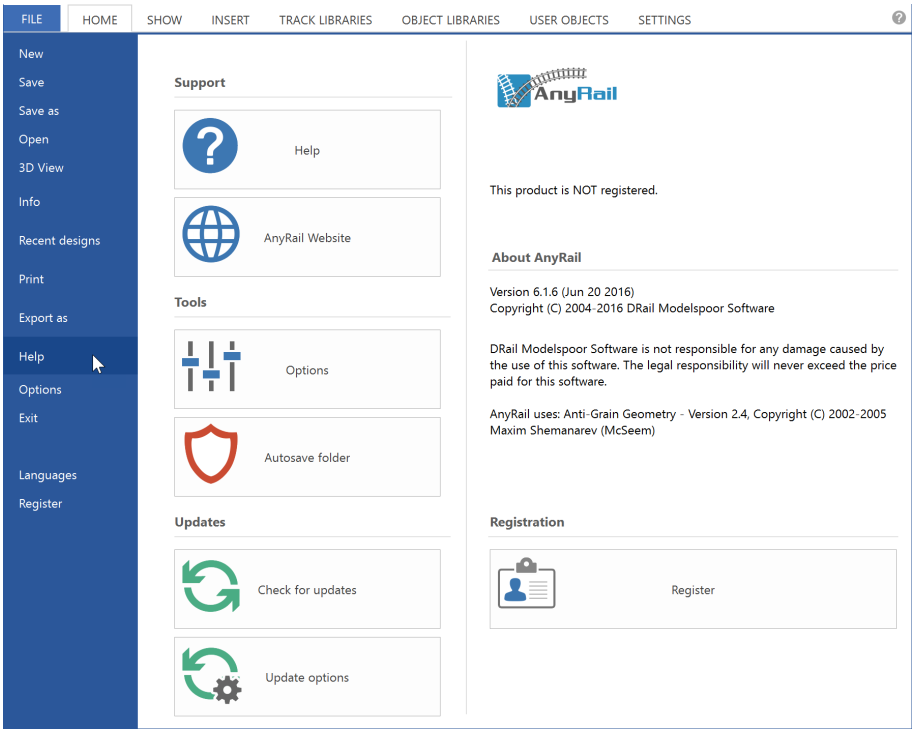
3D File Create a 3D file that can be imported in most 3D viewers.

Trainplayer export file Create a file that can be interpreted by Trainplayer. Trainplayer is a program to simulate running trains

that can be found here: TrainPlayer.

JMRI Layout file Creates a file that can be opened in JMRI PanelPro. More info is here: JMRI.

Help



Help Open this documentation.

AnyRail Website Go to the AnyRail website.

Options Open the options dialog.

Autosave folder Open the folder with the automatically saved files. Use this function in case AnyRail stopped or was stopped in an unexpected way, and you want to recover the layout you were working on.

Check for updates Contact the AnyRail server and see if there are any updates.

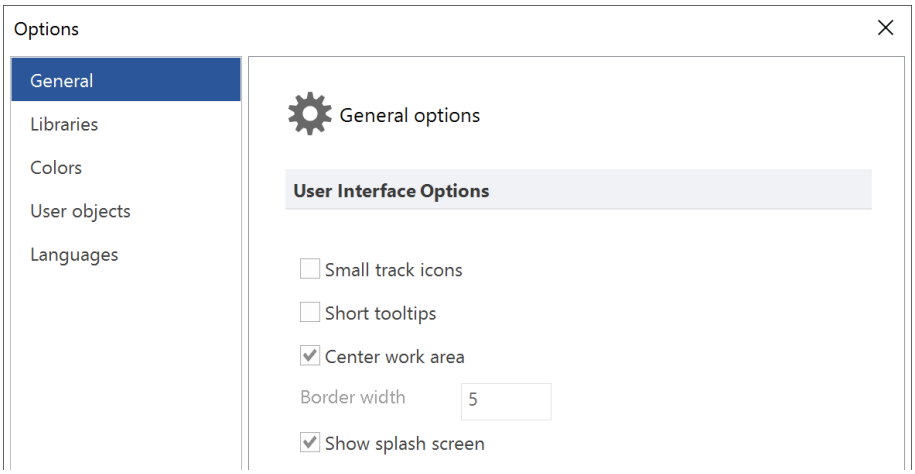
Update options Set the automatic update function.

Register Register the software with a license key.

Options

This button opens a new window where you can set additional options.

General options



Small track icons Check to make the track libraries smaller. This is useful for preserving screen estate.

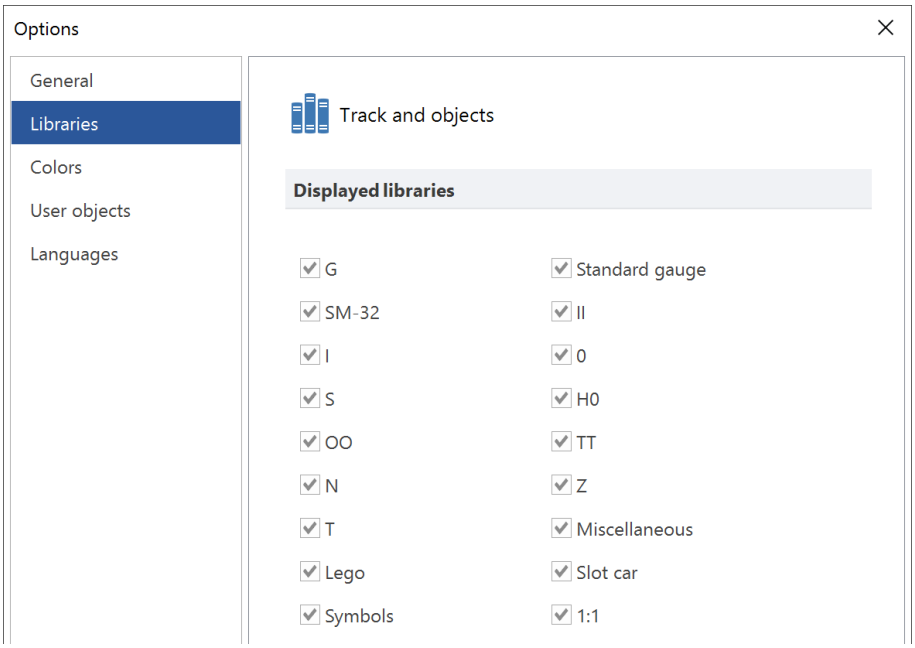
Short tooltips Check to display concise tooltips when hovering library items.

Center work area Uncheck to draw the work area in the left upper corner of the screen. Check to center the work area.

Border width The border width when not having a centered work area.

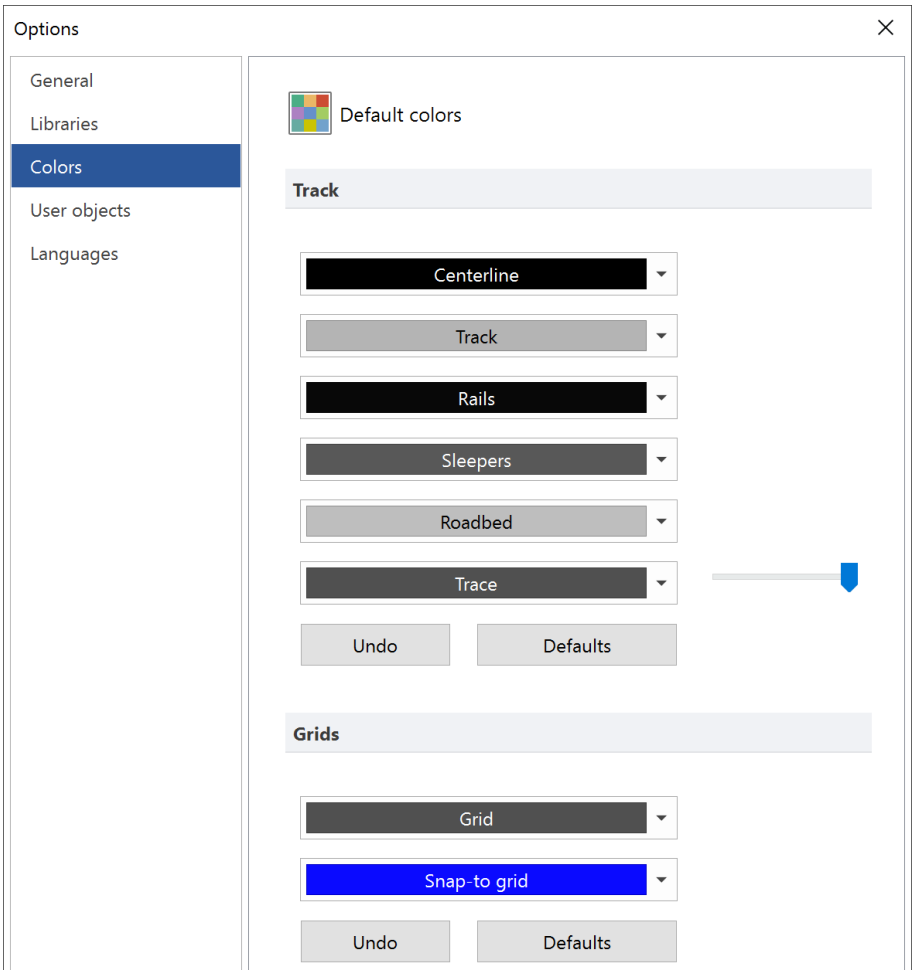
Show splash screen Show the logo while starting the program.

Libraries



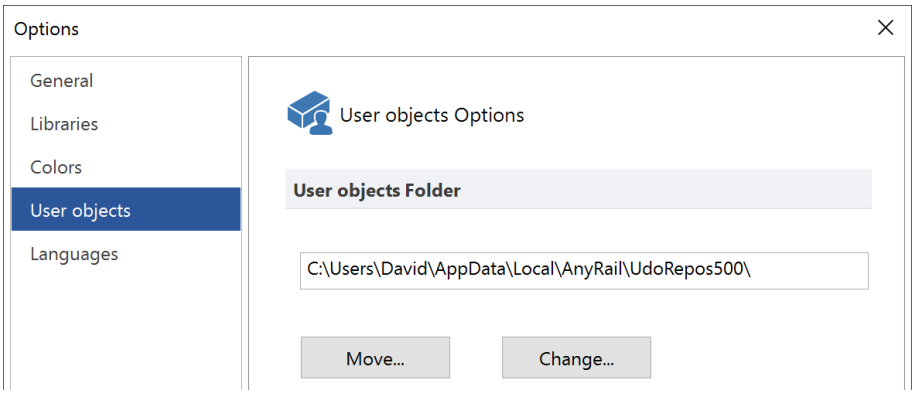
Select the scales for which you want to use the track and object libraries.

Colors



Set the default colors for the various types of items. The slider is to change the transparency.

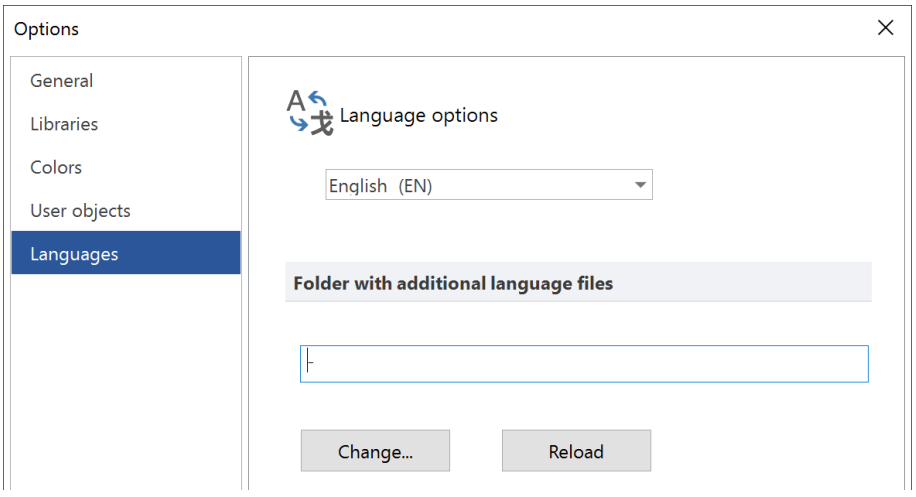
User objects



Move... Move your user objects to another folder.

Change... Set a new folder for your user objects.

Languages



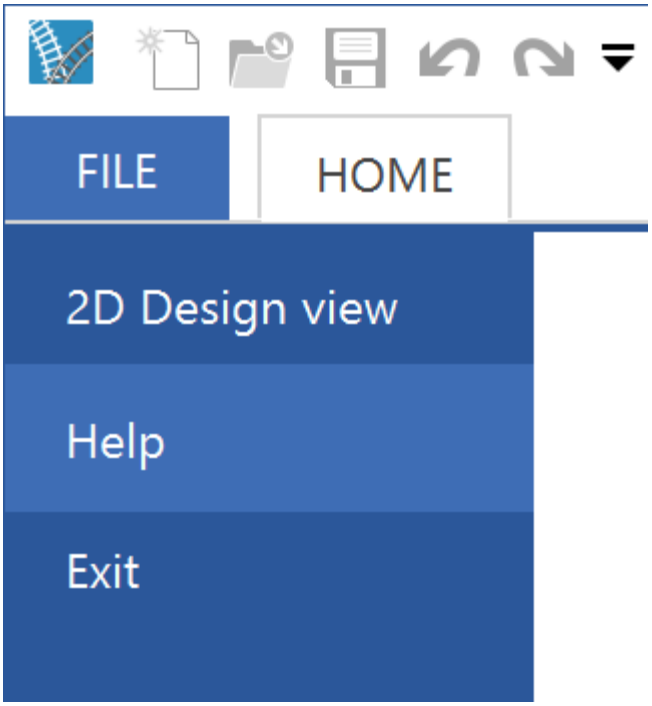
Select your preferred language from the drop down box.

Set the folder with additional language files if they are not in the default location. For normal operation, this is never necessary.

2.4.2 FILE tab, 3D view

This in fact is not a real tab. It is the backstage button.

Click it to open.



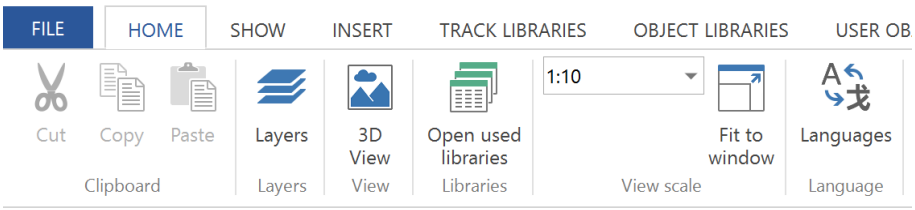
2D View Switch to the 2D design view.

Help Help, updates, and registration.

Exit Quit the program.

2.4.3 HOME tab, 2D View

The **HOME** tab contains functions you probably use most often.



Cut — Remove whatever's selected, and keep it in the Paste buffer. Shortcut is Ctrl-X.

Copy — Keep a copy of whatever's selected in the Paste buffer. Shortcut is Ctrl-C.

Paste — Paste whatever's in the Paste buffer. Shortcut is Ctrl-V.

Layers — Open the layers pane.

3D View — Open the 3D view. This may take a few seconds for larger layouts.

Open used libraries — Open the libraries that are used by the current plan.

View scale — Set the display scale.

Fit to window Find the largest scale such that the work area fits the window.

Languages Change the program's language.

2.4.4 HOME tab, 3D View

The **HOME** tab contains functions you probably use most often.

2D View Open the 2D design view.

Track Show the track.

Ground Show the ground.

Tunnels Show the tunnels.

No sky/Blue sky/Cloudy Select a background.

Use the standard camera 78.

Use the FPS camera 79.

Return the camera to its start position.

Snapshot Make a snapshot.

Lights Set the brightness for each light. There is a light on each of the four corners, a top light and an ambient light.

Roadbed Select how the roadbed looks.

Sleepers Select the sleeper material.

Track Select how the track looks.

Ground Select how the ground looks.

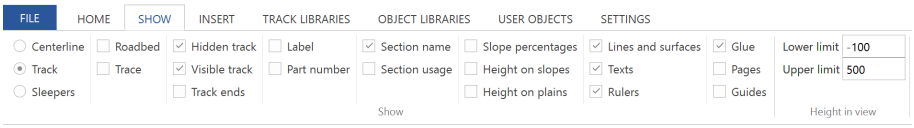
Underside Select the the material for the underside of the baseboard.

Tunnels Select the building material of tunnels and walls.

2.4.5 SHOW tab

The **SHOW** tab contains functions to control what's currently

displayed.



Centerline Show only a single line for the track.

Track Show the track. The outer lines of what's drawn are the actual rails.

Sleepers Draw Track with sleepers. The sleepers have the actual width, but not the actual position and distance from each other.

Roadbed Show the roadbed of the track. The actual width of the sectional elements is used here. Make sure to tick this box if you want to check if the track fits on the baseboard, and does not overlap.

Trace Show a trace of the given **Width** under all track. This can be used to check clearances.

Width Width of the trace.

Hidden track Show all track labeled Hidden. This is dotted track in tunnels, hidden staging yards, etc.

Visible track Show all track not labeled Hidden. This is all track in plain sight.

Track ends Show clear boundaries between the sectional track elements.

Label Show the label for each part.

Part number Show a part number on each track element. The software tries to scale the font down on smaller parts. If this is not possible, the track number won't show.

Section name Show the name of the section. This only shows when there's enough room. The software determines a position and orientation for the text.

Section usage Show the usage of the section. This shows only when there's enough room.

Slope percentage This shows the percentage of the gradient (if any). 1% means one unit of descent/ascent per 100 units of distance, e.g. 1 cm per meter. When the slope is too steep, this percentage will be shown in red. See Settings 129 to set the maximum slope.

Height on slopes Show the height, but only on slopes.

Height on plains Show the height, but only on plains. The height is only shown here and there.

Lines and surfaces Show lines and surfaces.

Texts Show texts.

Rulers Show rulers.

Glue Show glue indicators.

Pages Show the pages as the layout would be printed in the current view scale.

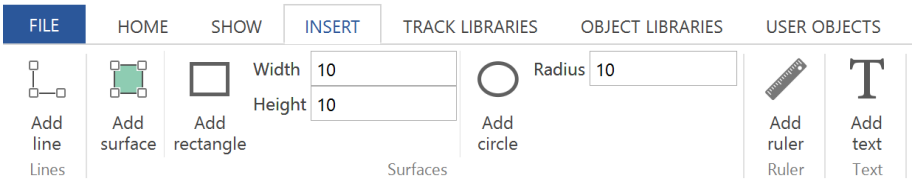
Guides Show circle center point for curved flex track.

Lower limit Only show all elements with a height of at least this value. Together with the **Upper limit**, his allows you to define a horizontal slice of your layout.

Upper limit Only show all elements with a height below this value.

2.4.6 INSERT tab

On the **INSERT** tab are elements that can be added to the layout.



Add line Add a line. You can use wider lines to draw streets or rivers.

Add surface Add a surface. This function can be used to draw shapes, the train table, or even your garden.

Add rectangle Add a rectangle with the given measurements.

Width Width of the rectangle to add.

Height Height of the rectangle to add.

Add circle Add a circle with the given radius.

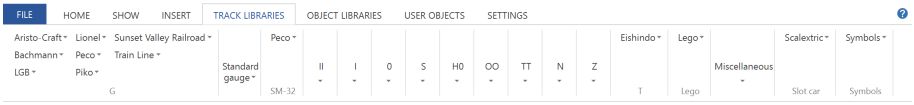
Radius Radius of the circle to add.

Add ruler Add a ruler. The length and style can be set afterwards.

Add text Add text. The font and size can be set afterwards.

2.4.7 TRACK LIBRARIES tab

On the **TRACK LIBRARIES** tab you can find all supported track libraries.



Note that the libraries are sorted by scale or gauge.

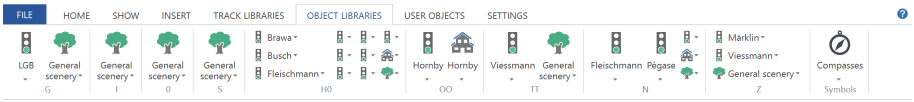
Click on the little down arrow to open a folded group (e.g. H0 in the picture).

Click a manufacturer's name to get a list of the track systems we support.

TIP: Most people only use one gauge. To hide all gauges you are not going to use, go to the Options 115.

2.4.8 OBJECT LIBRARIES tab

On the **OBJECT LIBRARIES** tab you can find all the predefined objects, such as signals, trees, and structures.



The icon indicates the sort of objects that you'll find.

Click the small arrow to open the list of supported libraries.

TIP: Most people only use one gauge. To hide all gauges you are not going to use, go to the Options 115.

2.4.9 USER OBJECTS tab

On the **USER OBJECTS** tab you can manage your user objects.

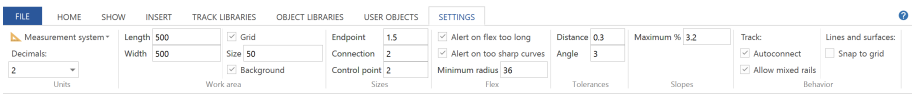
Click **Download new items** to download items that others have shared.

The items are ordered per scale, per manufacturer.

2.4.10 SETTINGS tab

Use the **SETTINGS** tab to change the overall settings of the software.

AnyRail remembers settings between sessions, but also saves them with each layout.



Measurement system — Choose from cm, mm, inches with fractions or decimals.

Decimals — Set the display accuracy of all values.

Length — The length of the work area on screen. Make it somewhat larger than your train table.

Width — The width of the work area on screen. Make it somewhat larger than your train table.

Grid	Show a grid.
Size	Size of a square of the grid.
Background	Put the grid underneath everything else.
Endpoint	The drawing size of an endpoint. An endpoint is the outer end of a piece of track.
Connection	The drawing size of a connection. The connection is the circle denoting that two pieces of track are connected.
Control point	The drawing size of the control points. These are the points to manipulate flex track and lines.
Alert on flex too long	When checked, overstretched flex appears red.
Alert on too sharp curves	When checked, too-tightly curved flex appears red.
Minimum radius	Radius used for determining when **Alert in too sharp curves** triggers.
Distance	The maximum distance allowed allowed between connecting endpoints.

Angle	The maximum angle allowed between connecting endpoints.
Maximum %	The maximum percentage allowed on slopes.
Autoconnect	Automatically connect track when endpoints are close enough.
Allow mixed rails	When checked, any track with the same gauge will connect. Uncheck to make sure you use the correct transition track.
Snap to grid	Makes lines and surfaces snap to an underlying grid. The left upper point of the line or surface is aligned with the grid.
Size	The underlying grid size for **Snap to grid.** If the size is very small, the grid will work but not be displayed fully.

2.5 Context sensitive tabs and popup menus

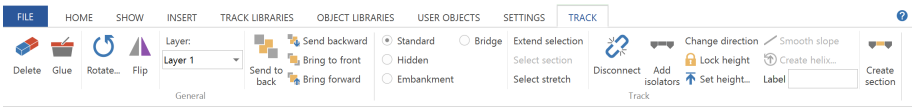
Some tabs only display in specific cases, depending on what you've currently selected on screen.

These tabs have a green glow.

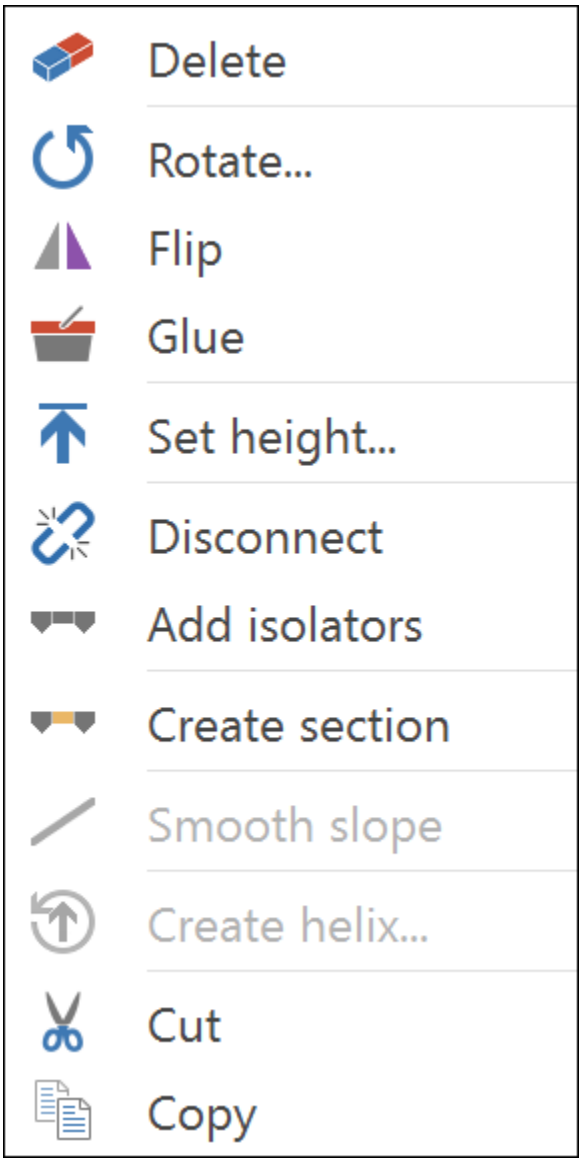
When you right-click an object, a popup menu comes up, giving you fast access to the most frequently used features.

2.5.1 TRACK tab and menu

The **TRACK** tab appears when track is selected.



The track popup menu appears when you right-click the track.



Delete Delete the selected track.

Glue Glue the selected track to prevent accidentally moving it.

Rotate Rotate the selected track and all connected track with it.

Flip Mirror all selected track with all connected track.

Layer Move selected track to another layer.

Send to back Send this track to the back of all elements with the same height.

Send backward Send this track one step back relative to all elements with the same height.

Bring to front Bring this track on top of all the elements with the same height.

Bring forward Bring this track one step further to the top relative to all elements with the same height.

Standard The track is displayed as-is, both in 2D and 3D.

Hidden The track is displayed as a dotted line in 2D. In 3D, it will be hidden, and a tunnel is created if necessary.

Embankment In 2D, small lines indicate that the track is on an embankment. In 3D, the ground is shaped as an embankment.

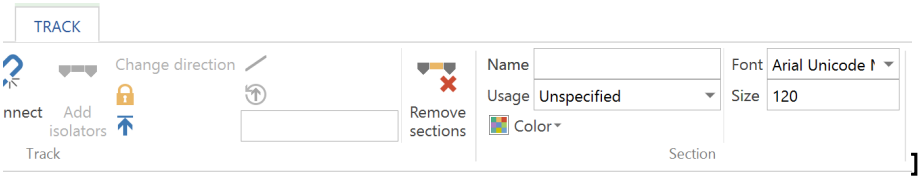
Bridge In 2D, trellis is drawn over the bridge. In 3D, the track is put on pillars.

Extend selection	Enlarge the selection in a logical way. Double click on the track has the same result.
Select section	Only when sections are used: select the complete section.
Select stretch	Select all connected track.
Disconnect	Disconnect the selected track.
Add isolators	Insert isolators at the outer ends of the current selection.
Change direction	For single track only: add an arrow to indicate one way track.
Lock height	Lock the heights for the endpoints of the track.
Set height	Set the height of the selected track. See here 52 for more details.
Smooth slope	Create a slope for the selected track. See here 55 for more details.
Create helix	Create a helix from the currently selected, **unconnected** curve. See here 31 for more details.
Label	Set a label for the selected track element.

Create section Turn the selection, or isolated track, into a section. See here 45 for more details.

Section functions

Whenever a section 45 is defined for the selected track, the tab has a few additional functions.



Remove sections Remove the section definitions. The track itself is not removed.

Name Enter a name for the section here.

Usage Select a usage type here.

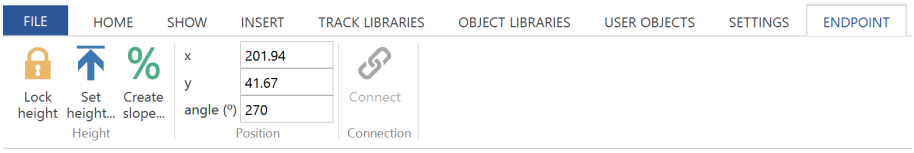
Color Select a color for the section.

Font Select a font for the section label.

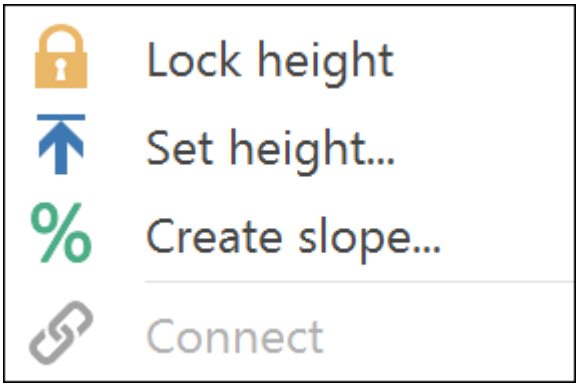
Size Set a font size for the section label.

2.5.2 ENDPOINT tab and menu

Clicking on an endpoint (the small line and triangle at the end of the track) reveals the **ENDPOINT** tab.



The endpoint popup menu appears when you right-click an endpoint.



Lock height Lock the height so it cannot be changed by accident. Be careful using this function and make sure that you check the heights surrounding it to confirm the slopes are all OK.

Set height... Set the height of this point. For an explanation go here 54 .

Create slope... Create a slope with a certain percentage. For an explanation go here 54.

x The x coordinate of this point (left to right).

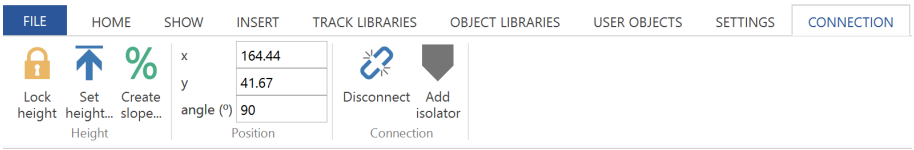
y The y coordinate of this point (top to bottom).

angle The direction of the endpoint.

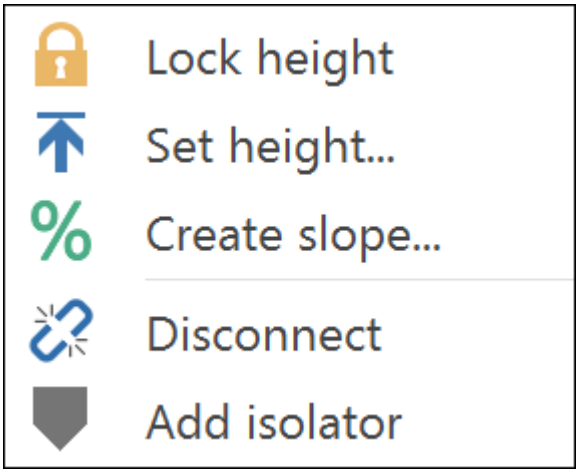
Connect Connect this endpoint to a nearby other endpoint.

2.5.3 CONNECTION tab and menu

Clicking on a connection (the small circle between two pieces of track) reveals the **CONNECTION** tab.



The connection popup menu appears when you right-click a connection.



Lock height Lock the height so it cannot be changed by accident. Be careful using this function and make sure that you check the heights surrounding it to confirm the slopes are all OK.

Set height... Set the height of this point. For an explanation go here 54.

Create slope... Create a slope with a certain percentage. For an explanation go here 54.

x The x coordinate of this point (left to right).

y The y coordinate of this point (top to bottom).

angle The direction of the endpoint.

Disconnect Remove the connection and disconnect the track.

Add/Remove isolator Adds or removes the isolator between the two pieces of track. Use this to create sections 47.

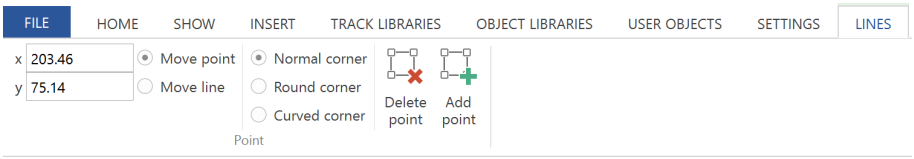
2.5.4 LINES tab and menu

The **LINES** tab is only available when a line or one of its points is selected. A general explanation is here 59.

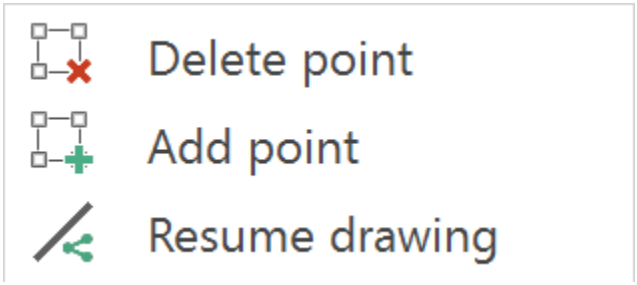
The popup menu is available when you right-click a point or a line.

Point functions

Tab



Popup menu



x The x coordinate of this point (left to right).

y The y coordinate of this point (top to bottom).

Move point Move only this point.

Move line Move the whole line.

Normal corner The corner defined by the neighboring points.

Round corner A perfect arc.

Curved corner An elliptic corner.

Delete point Delete the current point.

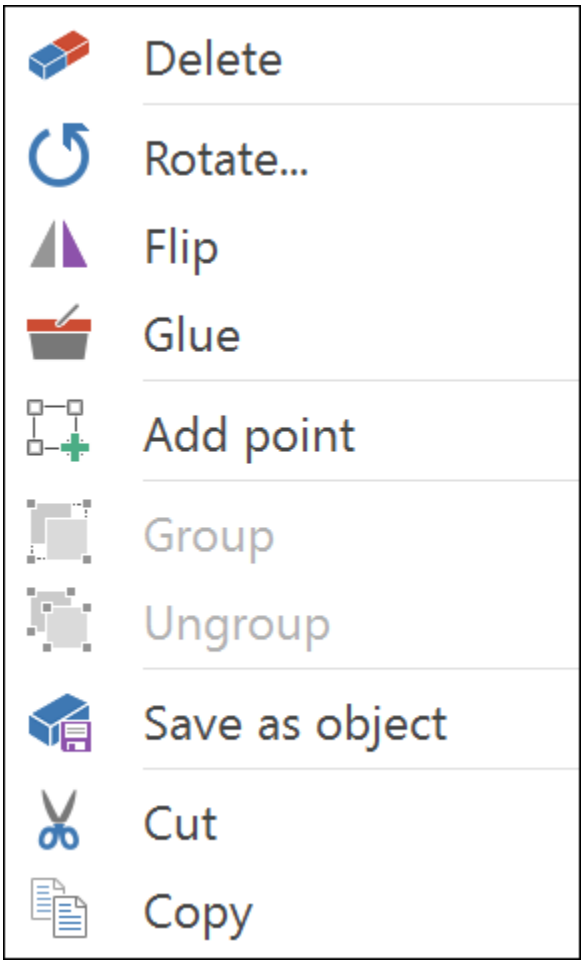
Add point Add a point close to the current point.

Resume drawing Continue to draw a line from here.

Line functions

Tab

Popup menu



Delete Delete the line.

Glue Glue the line to avoid moving it by accident.

Rotate... Rotate the line.

Flip Mirror the line.

Layer Select to move the lined to another layer.

Send to back	Send this line to the back of all elements with the same height.
Send backward	Send this line one step back relative to all elements with the same height.
Bring to front	Bring this line on top of all the elements with the same height.
Bring forward	Bring this line one step further to the top relative to all elements with the same height.
Line width	Set the drawing width of the line.
Height	Set the height of the line. A line has one height, it can not be tilted. All lines are drawn before the track is drawn.
Background	Put this line in the background.
Line color	Set the drawing color of the line.
Transparency	Slide to set the transparency of the line.
Normal corners	Set all corners to normal.

Round corners Set all corners to perfect arcs.

Curved corners Set all corners to elliptical curves.

Rounded points Round the points (for larger line widths).

Save as object Create a user object from the selected lines.

Add point Add point at cursor.

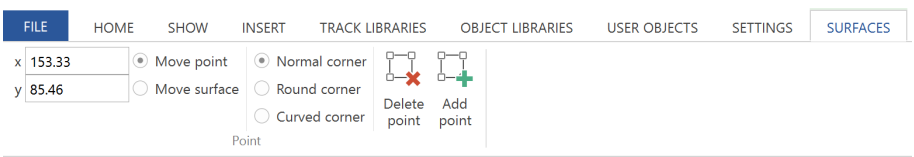
2.5.5 SURFACES tab and menu

The **SURFACES** tab is only available when a surface, or one of its points is selected. A general explanation is here 59.

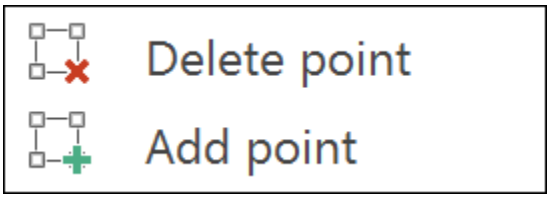
The popup menu is available when you right-click a point or a surface.

Point functions

Tab



Popup menu



x The x coordinate of this point (left to right).

y The y coordinate of this point (top to bottom).

Move point Move only this point.

Move surface Move the whole surface.

Normal corner The corner defined by the neighboring points.

Round corner A perfect arc.

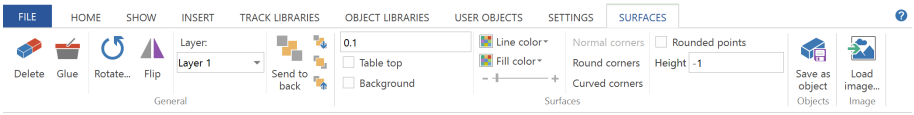
Curved corner An elliptic corner.

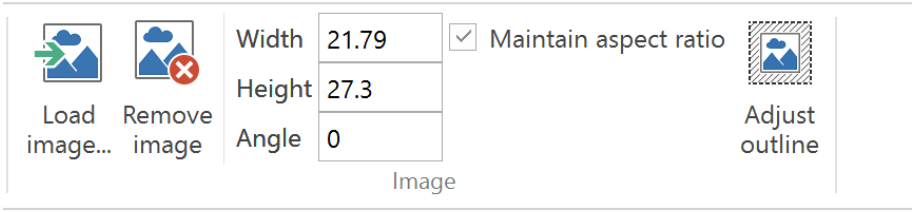
Delete point Delete the current point.

Add point Add a point close to the current point.

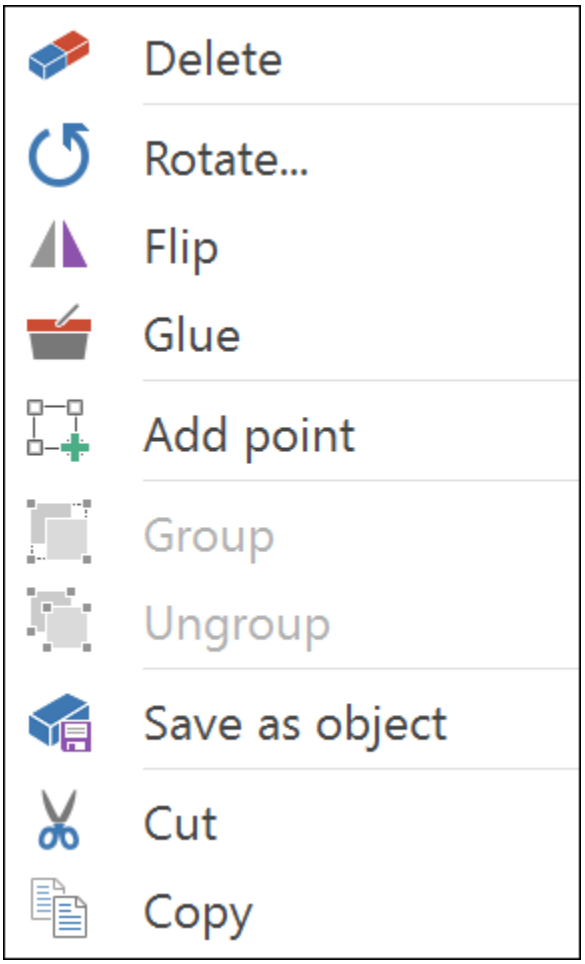
Surface functions

Tab





Popup menu



Delete Delete the surface.

Glue Glue the surface to avoid moving it by accident.

Rotate... Rotate the surface.

Flip Mirror the surface.

Layer Select to move the surface to another layer.

Send to back Send this surface to the back of all elements with the same height.

Send backward Send this surface one step back relative to all elements with the same height.

Bring to front Bring this surface on top of all the elements with the same height.

Bring forward Bring this surface one step further to the top relative to all elements with the same height.

Line width Set the drawing width of the outline.

Table top Check to make this part of the train table. This affects the 3D view.

Background Put this surface in the background.

Line color Set the drawing color of the line.

Fill color Set the fill color of the surface.

Transparency Slide to set the transparency of the surface.

Normal corners Set all corners to normal.

Round corners Set all corners to perfect arcs.

Curved corners Set all corners to elliptical curves.

Rounded points Round the points (for larger outline widths).

Height Set the height of the surface. A surface has one height, it can not be tilted. All surfaces are drawn before the track is drawn.

Save as object Create a user object from the selected surfaces.

Load image Load an image to fill the surface.

Remove image Remove the image that fills the surface.

Width, Height, Angle Set the size of the image (in your measurement units), and the orientation.

Maintain aspect ratio Keep the aspect ratio of the original image.

Adjust outline Recalculates the surface outline so it fits the picture exactly.

Add point Add point at cursor.

Group Group selected elements.

Ungroup Ungroup this group.

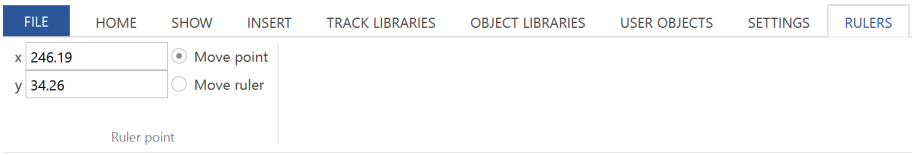
2.5.6 RULERS tab and menu

More information on working with rulers can be found here 69.

Apart from simply dragging its endpoints, you can either click the ruler or one of its endpoints to manipulate it.

Ruler point

The ruler point tab:



The ruler point does not have a popup menu.

x The x coordinate of this point (left to right).

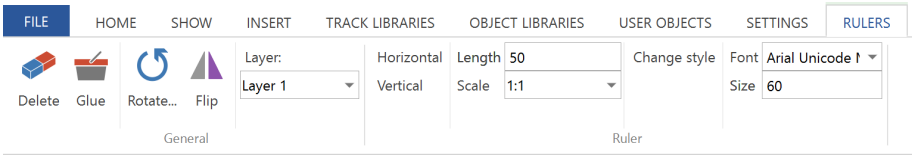
y The y coordinate of this point (top to bottom).

Move point Move only this endpoint of the ruler.

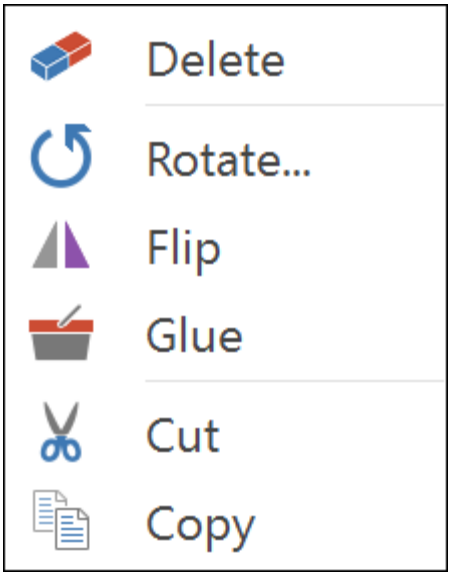
Move ruler Move the whole ruler.

Ruler

When the ruler is selected, the following tab appears:



When the ruler is right-clicked, the following menu appears:



Delete Delete the ruler.

Glue Glue the ruler to avoid accidentally moving it.

Rotate... Rotate the ruler.

Flip Mirror the ruler.

Layer Move the ruler to another layer.

Horizontal Position the ruler horizontally. Click again to put it upside down.

Vertical Position the ruler vertically. Click again to put it the other way around.

Length Set the length of the ruler.

Scale The scale of the ruler. The displayed length is relative to the modeling scale.

Change style Change the way the ruler looks.

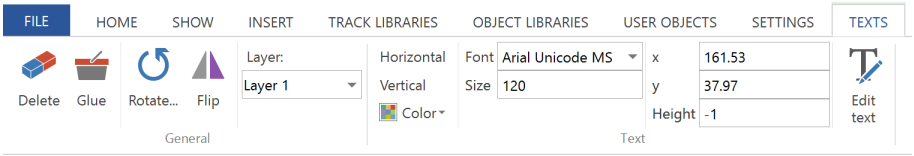
Font Set the font of the ruler text.

Size Set the font size of the ruler text.

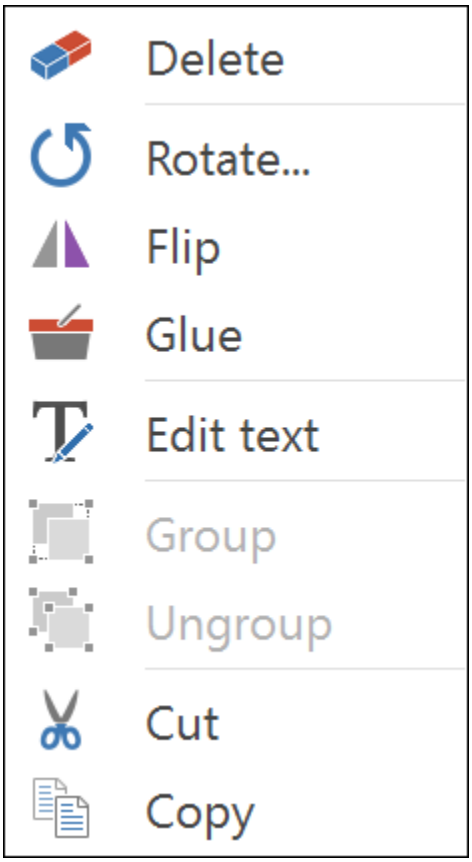
2.5.7 TEXTS tab and menu

More information on working with text can be found here 67.

The **TEXT** tab appears only when text is selected.



The text popup menu appears when you right-click the text.



Delete Delete selected text.

Glue Glue selected text to avoid accidentally moving it.

Rotate Rotate the selected text.

Flip Mirror the selected text.

Layer Select a layer for the text.

Horizontal Position the text horizontally. Click twice to position the text upside down.

Vertical Position the text vertically. Click twice to position it the other way around.

Color Set a color for the selected text.

Font face Select a font.

Size Select a font size.

x The x coordinate of this point (left to right).

y The y coordinate of this point (top to bottom).

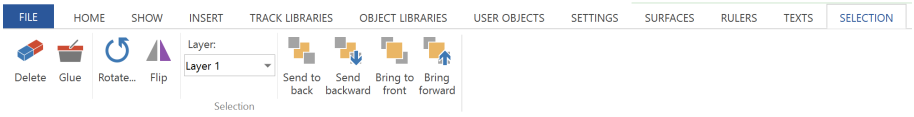
Height Draw height of the text.

Edit text Click to edit the text. This can also be achieved by double clicking the text.

TIP: Quickly start editing text by double-clicking it.

2.5.8 SELECTION tab

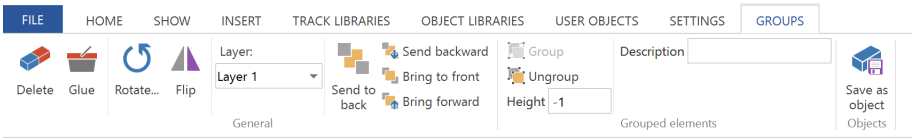
The **SELECTION** tab is only available when multiple items are selected.



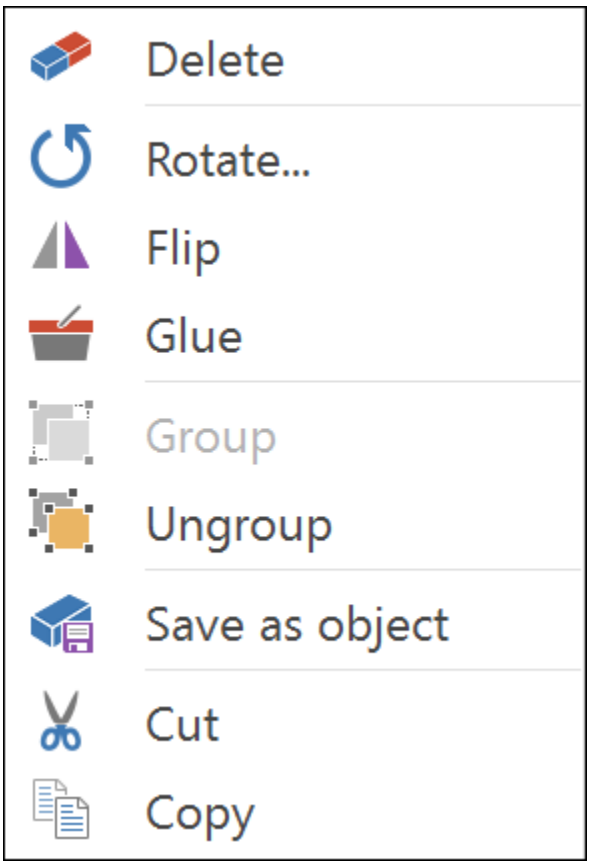
Delete	Delete the selected items.
Glue	Glue the selected items to avoid moving it by accident.
Rotate...	Rotate the selected items.
Flip	Mirror the selected items.
Layer	Select to move the selected items to another layer.
Send to back	Send selected items to the back of all elements with the same height.
Send backward	Send selected items one step back relative to all elements with the same height.
Bring to front	Bring selected items on top of all the elements with the same height.
Bring forward	Bring selected items one step further to the top relative to all elements with the same height.

2.5.9 GROUPS tab and menu

The **GROUPS** tab is only available when multiple groupable items are selected, or a group.



The group popup menu appears when you right-click the group.



Delete Delete the group.

Glue Glue the group to avoid moving it by accident.

Rotate... Rotate the group.

Flip Mirror the group.

Layer Select to move the group to another layer.

Send to back Send this group to the back of all elements with the same height.

Send backward Send this group one step back relative to all elements with the same height.

Bring to front Bring this group on top of all the elements with the same height.

Bring forward Bring this group one step further to the top relative to all elements with the same height.

Group Group selected lines and groups (only available when applicable).

Ungroup Ungroup this group (only available when applicable).

Height Draw height of the group.

Description Description for the group (only available when applicable).

Save as object Create a user object from the group.

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