

Rust and Speed – Track Builder

Turn Ideas Into Playable Tracks in Minutes



Contact:

hello@2pointsoft.com

<https://2pointsoft.com>

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1. Introduction

Rust and Speed – Track Builder is a procedural track creation tool for Unity designed to help developers build racing tracks quickly using a simple point-based workflow.

By placing Track Points in the Scene View, the builder automatically generates the final track mesh and provides additional tools for creating barriers, supports, structures, checkpoints, start grids, and decorative elements.

The asset is designed for rapid prototyping while still providing enough flexibility for production-ready environments.

Whether you are building a hover racer, arcade racing game, futuristic circuit, kart racer, or a custom gameplay experience, Rust and Speed – Track Builder allows you to create playable tracks in minutes.

Key Features

Procedural Track Generation

Generate complete tracks from Track Points placed directly in the scene.

Visual Theme Presets

Quickly change the appearance of your track using included themes.

Barrier System

Generate mesh barriers or place custom barrier prefabs along the track.

Track Supports

Automatically create support pillars beneath elevated track sections.

Structure System

Generate tunnels, structures, and enclosed sections between Track Points.

Gallery System

Create open-sided structural sections with customizable columns.

Tunnel Dividers

Add internal divider frames to structures and tunnels.

Tunnel Lights

Automatically place light prefabs inside structures.

Decoration Rules

Populate tracks with decorative objects using procedural placement rules.

Checkpoint Generation

Generate race checkpoints automatically along the track path.

Start Grid Generation

Generate aligned starting positions for racing gameplay.

Snap Objects

Snap GameObjects directly to the track surface and direction.

Auto Fit To Terrain

Adjust Track Points to follow terrain height automatically.

Example Track Generator

Create sample layouts instantly for testing and learning.

URP and HDRP Demo Scenes

Included showcase scenes for both render pipelines.

2. Requirements

Before using Rust and Speed – Track Builder, verify that your project meets the following requirements.

Unity Version

Unity 6.3 or newer.

The asset has been developed and tested using Unity 6.3.

Supported Render Pipelines

Universal Render Pipeline (URP)

High Definition Render Pipeline (HDRP)

Demo scenes are included for both pipelines.

Recommended Layers

The following layers are recommended when using the included race prototyping tools:

Player

CheckPoint

Included Content

Rust Track Builder

Procedural track generation system.

Race Prototyping Tools

Checkpoint generation, start grid generation, and race setup helpers.

Demo Scenes

Ready-to-use example scenes.

Materials and Textures

Several visual themes and materials are included.

Prefabs

Barrier, support, and decoration prefabs are included for immediate use.

3. Installation

Import the package into your Unity project using the Unity Package Import process.

After the import is complete, the asset can be found inside the following folder:

Assets/2PointSoft/RustAndSpeed/

The package is organized into the following folders.

Demo

Contains all demonstration scenes.

Documentation

Contains the asset documentation.

RustRaceSystem

Contains the optional race prototyping tools.

RustTrackBuilder

Contains the procedural track generation system and all related assets.

Verifying Installation

To verify that the asset was imported correctly:

1. Open one of the included demo scenes.
2. Press Play.
3. Verify that the track, checkpoints, and race elements appear correctly.

If the demo scene loads successfully, the asset has been imported correctly.

Included Demo Scenes

Demo_URP_Showcase

The primary showcase scene demonstrating a complete playable environment.

Demo_URP_FeatureGallery

A scene focused on demonstrating individual builder features and systems.

Demo_HDRP_Showcase

HDRP version of the showcase scene demonstrating the asset using the High Definition Render Pipeline.

4. Quick Start Guide

The following section demonstrates the fastest way to create a playable track using Rust and Speed – Track Builder.

Step 1 – Create a Track Builder

Create an empty GameObject in your scene.

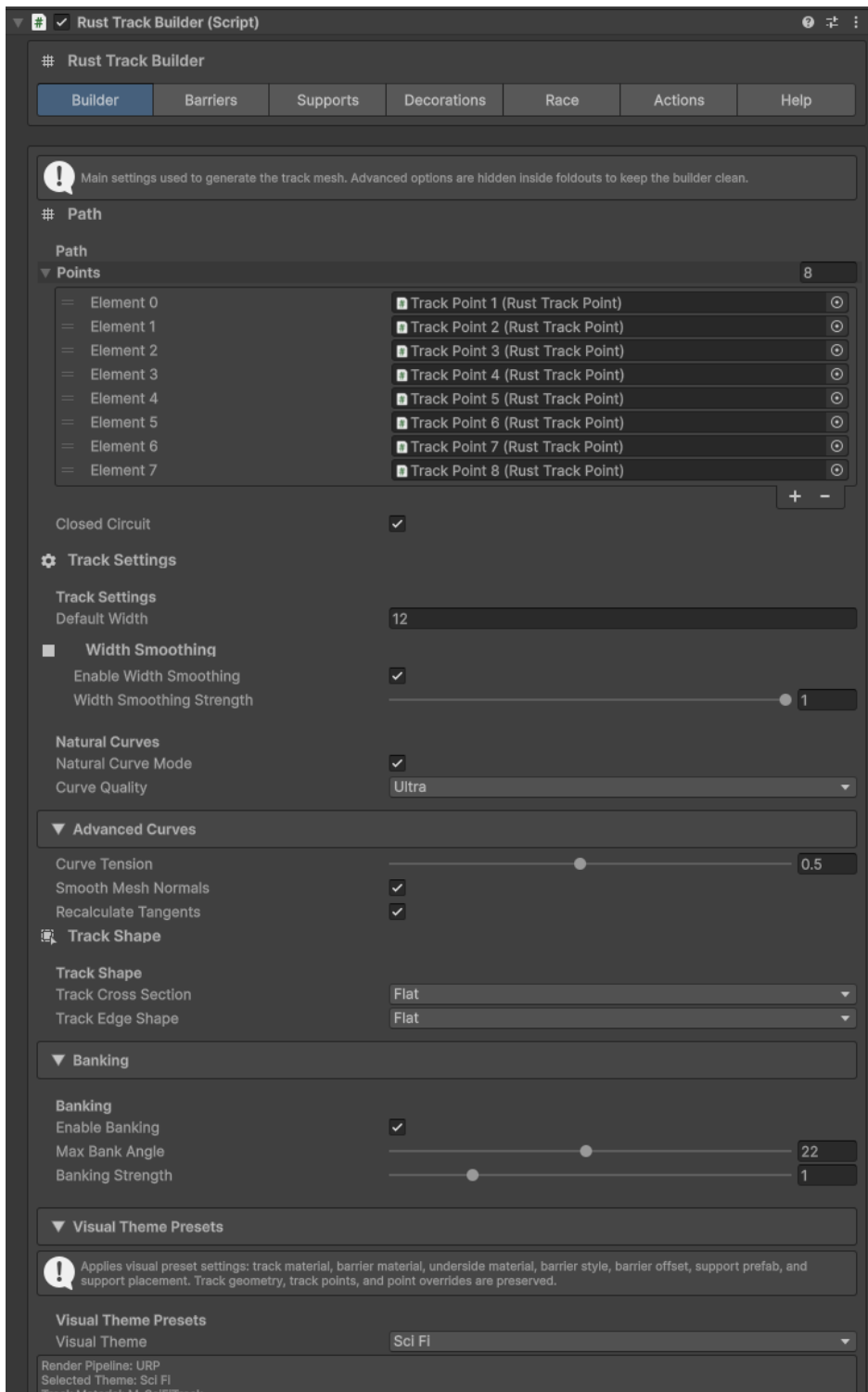
Rename the GameObject to:

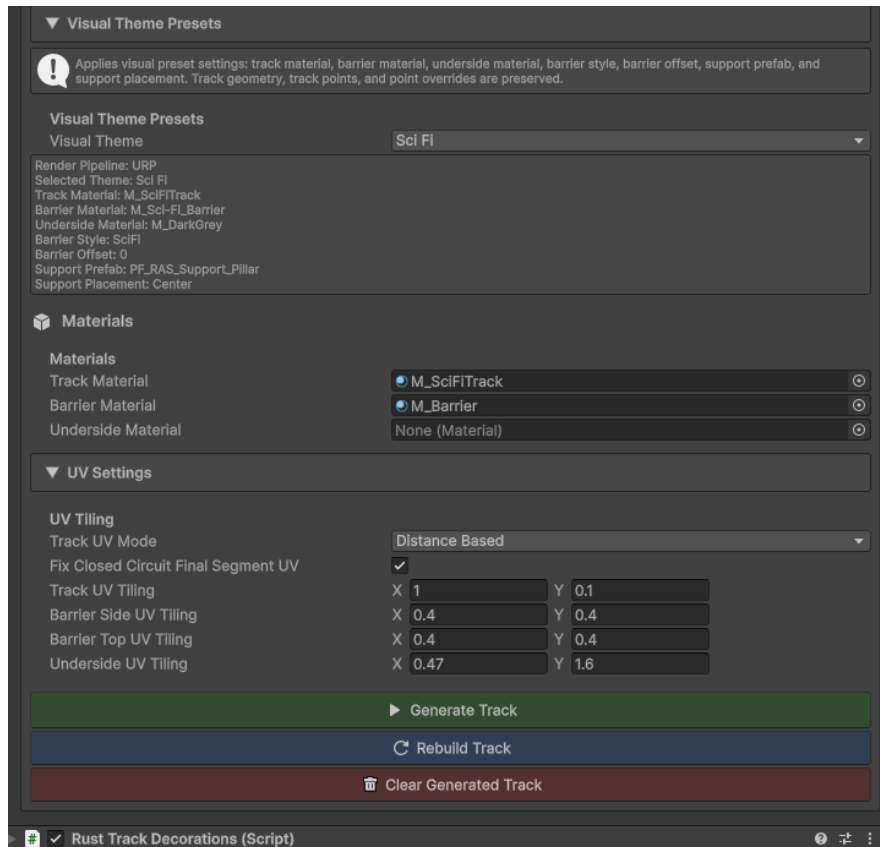
Rust Track Builder

Add the following component:

RustTrackBuilder

Once added, the custom Rust Track Builder inspector will appear.





Step 2 – Create Track Points

Track layouts are created using Track Points.

There are two common methods for creating Track Points.

Method A – Example Track Generator

Open the Actions tab.

Locate the Example Track Build section.

Select one of the available example layouts.

The builder will automatically generate a complete set of Track Points.

Method B – Manual Track Creation

Use the Point Editing section.

Click:

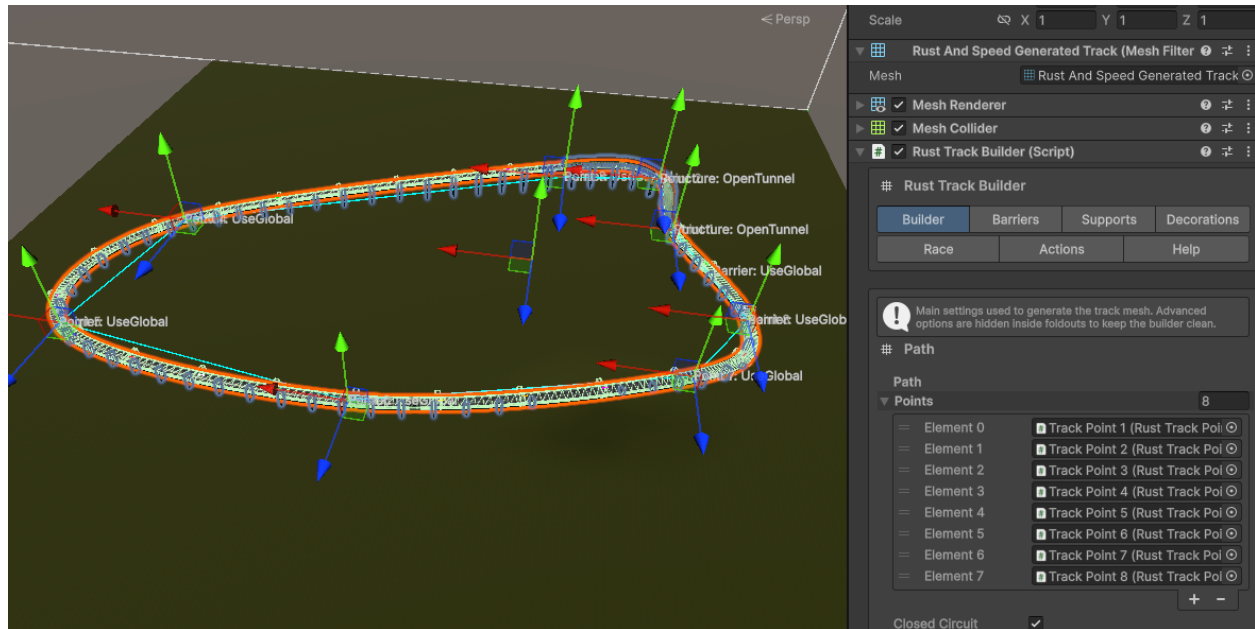
Add Point At End

A new Track Point will be created.

Move the Track Point using Unity's standard transform tools.

Repeat the process until the desired layout is complete.

Track Points are processed in the same order they appear inside the Points list.



Step 3 – Generate the Track

Open the Builder tab.

Verify that at least two Track Points exist.

Click:

Generate Track

The builder generates:

Track Mesh

Mesh Renderer

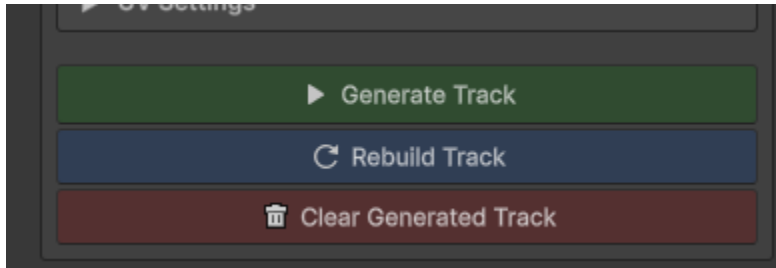
Mesh Collider

UV Mapping

If changes are made later, click:

Rebuild Track

to regenerate the track using the latest settings.



Step 4 – Apply a Visual Theme

Open the Builder tab.

Expand the Visual Theme Presets section.

Select one of the included themes:

Sci Fi

Sci Fi 2

Sci Fi Organic

Road

Gravel

The selected theme automatically applies compatible materials and visual settings.

Step 5 – Generate Race Elements

Open the Race tab.

Generate checkpoints by clicking:

Generate Checkpoints

Generate starting positions by clicking:

Generate Start Grid

The generated objects can be assigned automatically using the provided race setup tools.

#

✓ Rust Track Builder (Script)

?

+

:

Rust Track Builder

Builder

Barriers

Supports

Decorations

Race

Actions

Help

!

Generate checkpoints and start grid positions for the race system. Advanced placement options are grouped.

Auto Checkpoints

Auto Checkpoints

Checkpoint Race Manager

Rust Race Manager (Rust Race Manager)

Auto Assign Checkpoints To Race Manager

✓

Find Race Manager If Missing

✓

Checkpoint Count

25

Checkpoint Width

18

Checkpoint Height

8

Checkpoint Depth

4

▼ Advanced Checkpoint Settings

Checkpoint Group Name

Main Track

Checkpoint Vertical Offset

3

Create Checkpoint Respawn Points

✓

Checkpoint Respawn Height Offset

2

Checkpoint Vehicle Tag

Player

Auto Regenerate Checkpoints With Track

✓

Start Grid

Start Grid

Start Grid Race Manager

Rust Race Manager (Rust Race Manager)

Auto Assign Start Position To Race Manager

✓

Find Start Grid Race Manager If Missing

✓

Start Position Count

4

Start Grid Columns

2

Start Grid Lateral Spacing

4

Start Grid Row Spacing

8

Start Grid Backward Offset

20

Start Grid Vertical Offset

1

▼ Advanced Start Grid Settings

Start Grid Placement Fix

✓

Start Grid Use Incoming Direction

✓

Start Grid Clamp Inside Track Width

✓

Start Grid Width Padding

1.5

Clear Old Start Grid Before Generate

✓

+ Generate Checkpoints

⇌ Assign Checkpoints To Race Manager

🗑 Clear Checkpoints

+ Generate Start Grid

⇌ Assign First Start Position To Race Manager

🗑 Clear Start Grid

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Step 6 – Test the Track

Press Play.

Your generated track is now ready for testing and further customization.

5. Builder Tab

The Builder tab contains the primary settings used to generate and customize the track. Most track configuration is performed from this section.

Track Points

The Track Points list defines the path of the track.

Each Track Point represents a position along the track layout. The generated track follows the order of the points in the list.

Track Points can be added, removed, reordered, and edited individually.

Available options:

Track Points

List of all Track Points used to generate the track.

Closed Circuit

Connects the final Track Point back to the first Track Point, creating a complete loop.

When disabled, the track remains open-ended.

Track Settings

Track Settings control the overall shape and dimensions of the generated track.

Track Width

Defines the width of the track surface.

Larger values create wider tracks suitable for multiplayer or high-speed racing.

Track Thickness

Defines the thickness of the generated track mesh.

This setting is especially important when using elevated tracks with supports.

Width Smoothing

Width Smoothing creates smooth transitions between Track Points that use different width values.

When enabled, sudden width changes are blended gradually across the track.

This produces a more natural appearance and avoids visible width transitions.

Natural Curves

Natural Curves improve the overall flow of the generated track by smoothing directional changes between Track Points.

Higher values create softer and more rounded curves.

Lower values preserve sharper transitions and tighter corners.

Natural Curves are useful for racing tracks that require smoother driving lines.

Advanced Curves

Advanced Curves provide additional control over track interpolation.

These settings determine how intermediate points are generated between Track Points.

Increasing curve quality creates smoother geometry but may increase mesh complexity.

Use higher values for final production tracks and lower values during rapid prototyping.

Track Shape

Track Shape controls the profile of the generated track surface.

Depending on the selected shape, the track may appear completely flat or use a custom cross-section.

This allows the creation of different visual styles without modifying the layout itself.

Banking

Banking rotates the track surface around its forward direction.

Banking is commonly used on racing circuits to improve corner flow and create more dynamic environments.

Available options include:

Enable Banking

Enables or disables automatic banking.

Bank Strength

Controls the amount of banking applied to corners.

Bank Smoothing

Controls how gradually banking transitions occur between sections.

When combined with smooth curves, banking can significantly improve the visual quality of racing tracks.

Visual Theme Presets

Visual Theme Presets allow rapid styling of generated tracks.

The following themes are included:

Sci Fi

A futuristic visual style designed for hover racing environments.

Sci Fi 2

An alternative futuristic style with a different material set.

Sci Fi Organic

A softer science-fiction theme featuring more organic visual elements.

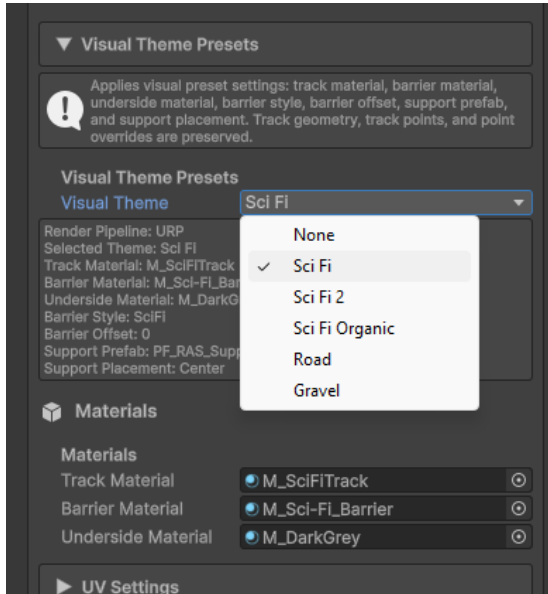
Road

A traditional road surface suitable for realistic racing environments.

Gravel

A rough terrain style useful for off-road or prototype tracks.

Selecting a theme automatically applies compatible materials and visual settings.



Materials

The Materials section controls the appearance of the generated track.

Track Material

Material applied to the main driving surface.

Side Material

Material applied to the sides of the track.

Bottom Material

Material applied to the underside of the track.

Materials can be replaced with custom materials to match the visual style of your project.

UV Settings

UV Settings control texture tiling across the generated track.

UV Tiling X

Controls texture repetition along the track length.

UV Tiling Y

Controls texture repetition across the width of the track.

Adjusting these values helps prevent stretched textures and improves material appearance.

Generate Track

Generate Track creates a completely new track using the current settings and Track Points.

Use this button after creating or modifying a track layout.

Rebuild Track

Rebuild Track regenerates the existing track using the latest settings.

This is useful after adjusting materials, barriers, supports, or curve settings.

Clear Generated Track

Removes the currently generated track objects from the scene.

This action only removes generated content and does not delete Track Points.

Recommended Workflow

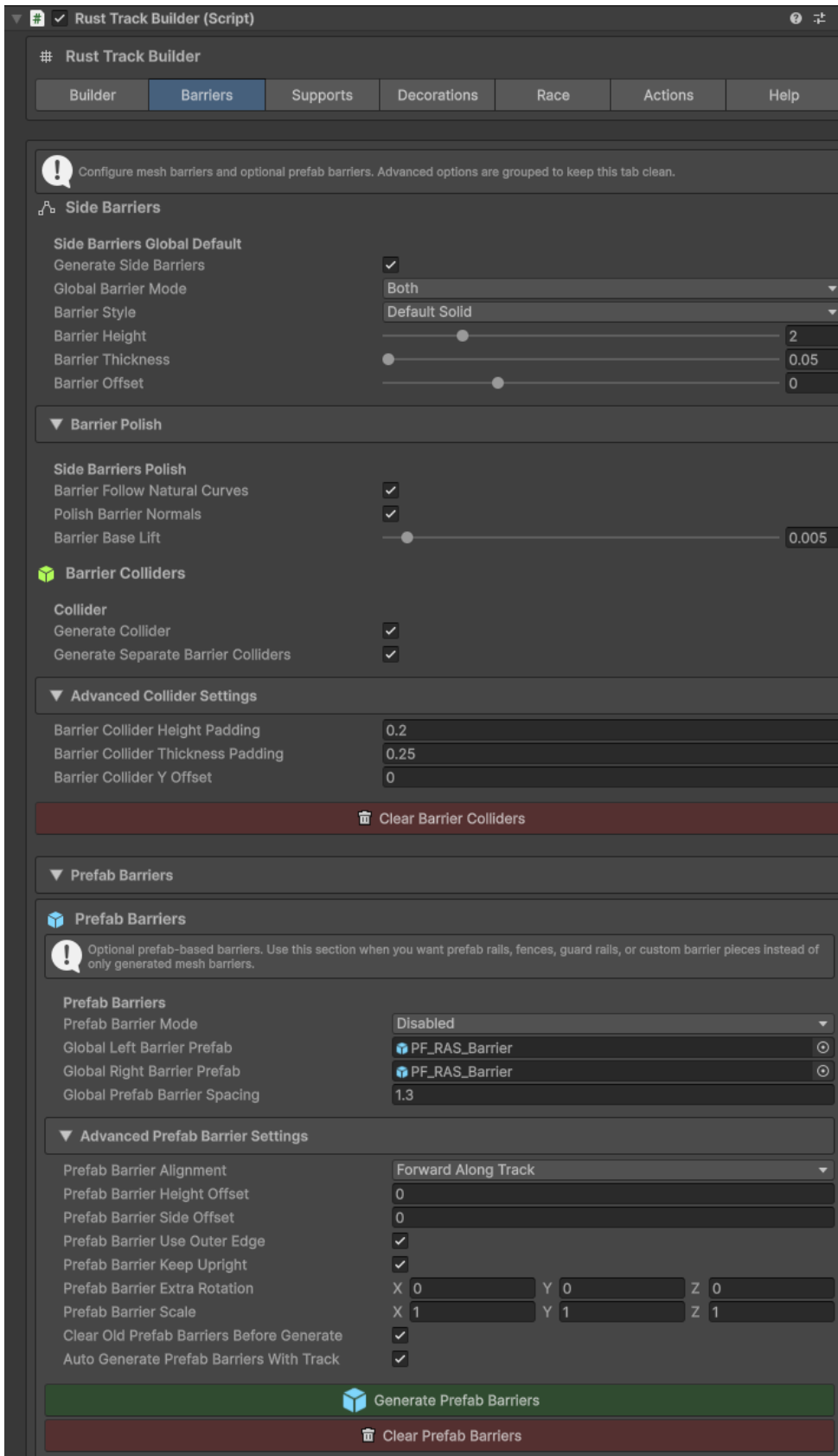
1. Create Track Points.
2. Configure track width and curve settings.
3. Enable Closed Circuit if required.
4. Select a Visual Theme.
5. Generate the track.
6. Continue with barriers, supports, and race elements.

This workflow provides the fastest path from a simple layout to a fully playable racing track.

6. Barrier System

The Barrier System allows you to generate protective barriers along the sides of the track. Barriers can be generated as procedural meshes or by placing custom prefabs along the track.

Barriers are useful for defining track boundaries, preventing players from leaving the racing surface, and improving the overall visual appearance of the environment.



Side Barriers

Side Barriers control the generation of procedural barrier meshes.

Enable Barriers

Enables or disables barrier generation.

Barrier Side

Determines where barriers will be generated.

Available options include:

Left

Right

Both

Most racing tracks use barriers on both sides.

Barrier Height

Controls the vertical height of generated barriers.

Increasing this value creates taller barriers.

Barrier Thickness

Controls the thickness of generated barrier geometry.

Barrier Offset

Defines the distance between the barrier and the edge of the track.

Positive values move barriers farther away from the track surface.

Barrier Material

Material applied to generated barriers.

You may use any compatible Unity material.

Barrier Polish

Barrier Polish settings improve the appearance of generated barriers.

These options help smooth transitions and improve visual consistency between segments.

Use these settings when creating production-ready tracks.

Barrier Colliders

Barrier Colliders allow generated barriers to interact with physics.

Enable Barrier Colliders

Generates colliders for procedural barriers.

When enabled, players and vehicles can collide with generated barriers.

Collider Height

Controls the collider height.

Collider Thickness

Controls collider thickness.

In most situations these values should closely match the visual barrier dimensions.

Advanced Collider Settings

Advanced Collider Settings provide additional control over barrier collision generation.

These options are intended for advanced users and larger tracks.

Default settings are recommended for most projects.

Prefab Barriers

Prefab Barriers allow custom prefabs to be placed automatically along the track instead of generating procedural barrier meshes.

This system is useful when creating:

Guard Rails

Sci-Fi Walls

Energy Barriers

Custom Fence Systems

Decorative Edge Structures

Enable Prefab Barriers

Enables automatic prefab placement.

Barrier Prefab

Prefab used during generation.

Included Prefab

PF_RAS_Barrier

The included barrier prefab can be used immediately after importing the asset.

Spacing

Controls the distance between placed prefabs.

Smaller values create denser placement.

Larger values reduce the number of spawned prefabs.

Advanced Prefab Barrier Settings

These settings provide additional control over prefab placement.

Alignment

Controls how prefabs align to the track direction.

Rotation

Allows additional rotation offsets.

Scale

Allows scale adjustments during generation.

Offset

Controls the position relative to the track edge.

These settings are useful when working with custom prefabs that require specific placement adjustments.

Per-Point Barrier Overrides

Barrier settings can be overridden at the Track Point level.

This allows different barrier configurations across individual sections of the track.

Available overrides include:

Barrier Style Override

Barrier Height Override

Barrier Thickness Override

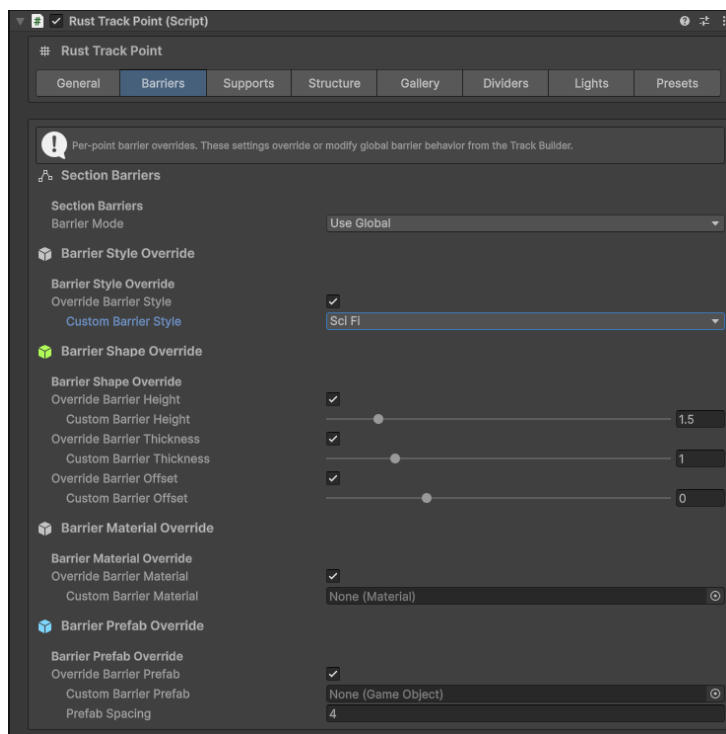
Barrier Offset Override

Barrier Material Override

Barrier Prefab Override

Prefab Spacing Override

Per-point overrides provide a flexible way to create unique sections without changing the global barrier settings.



Generate Prefab Barriers

Generates all prefab barriers using the current settings.

Use this button after modifying barrier prefab settings.

Clear Prefab Barriers

Removes all generated prefab barriers from the scene.

This operation only removes generated barrier instances and does not affect the original prefab asset.

Recommended Workflow

1. Generate the track.
2. Enable barriers.
3. Configure height, thickness, and offset.
4. Assign a material.
5. Test the visual appearance.
6. Enable colliders if required.
7. Use prefab barriers for custom track styles.

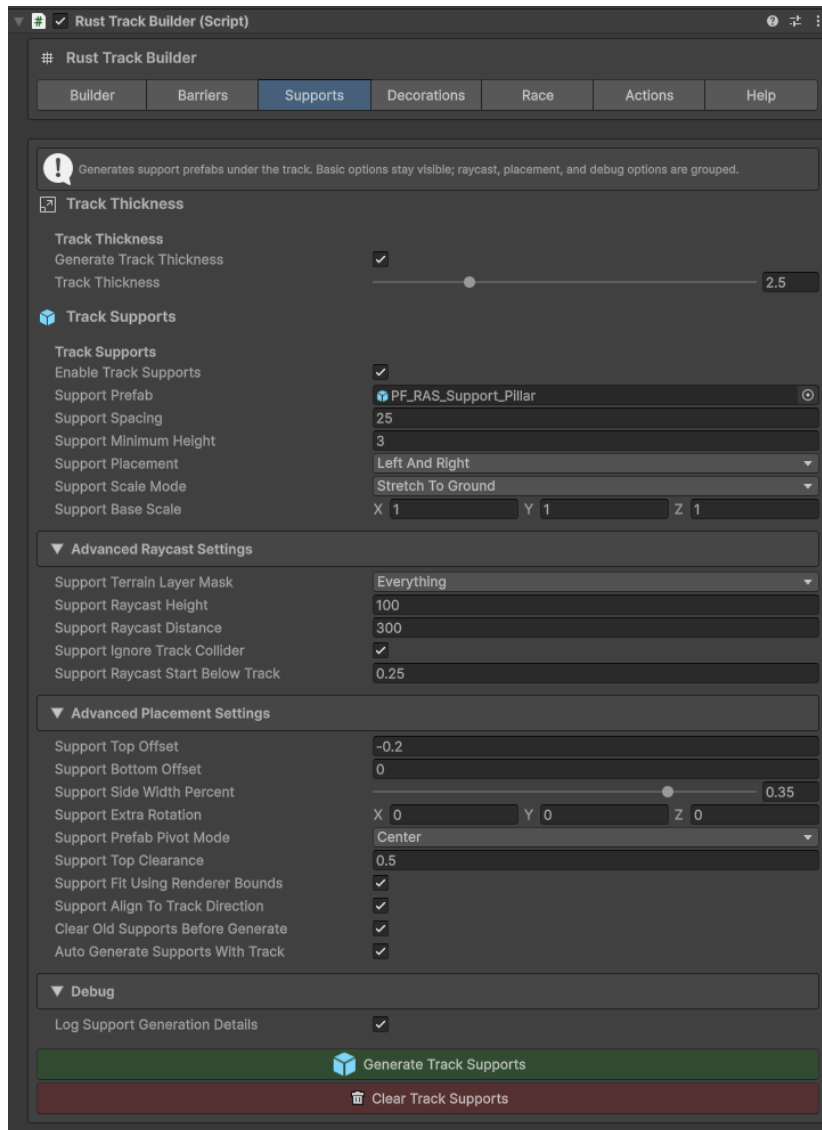
The Barrier System can be used independently or combined with supports, structures, and decorations to create more complex racing environments.

7. Support System

The Support System automatically generates structural supports beneath elevated sections of the track.

Supports help improve the visual appearance of floating tracks and provide a more believable connection between the track and the environment.

The system can place supports on terrain, static geometry, or any surface detected by the support raycasts.



Track Supports

Enable Supports

Enables or disables support generation.

Support Prefab

Prefab used when generating supports.

Included Prefab

PF_RAS_Support_Pillar

This prefab is included with the asset and can be used immediately.

Support Spacing

Controls the distance between generated supports.

Smaller values generate more supports.

Larger values generate fewer supports.

Support Width

Controls the width of generated supports when applicable.

Support Height

Controls the generated support height when using compatible support prefabs.

Advanced Raycast Settings

The support generator uses raycasts to locate the surface beneath the track.

Raycast Layer Mask

Defines which layers can be detected by support raycasts.

Raycast Distance

Maximum distance used when searching for a valid support placement surface.

Increasing this value is useful when creating large elevated tracks.

Ground Detection

Determines how support placement searches for valid surfaces.

Most projects can use the default settings.

Advanced Placement Settings

Advanced Placement Settings provide greater control over support placement.

Placement Offset

Controls the final position of generated supports.

Rotation Alignment

Determines how supports align to the detected surface.

Scale Controls

Allows support scaling adjustments during generation.

These settings are especially useful when using custom support prefabs.

Debug

The Debug section provides visualization tools used when testing support placement.

Debug options can help identify:

Raycast failures

Surface detection issues

Support spacing problems

Most users will only need these options during advanced setup or troubleshooting.

Per-Point Support Overrides

Support settings can be customized for individual Track Points.

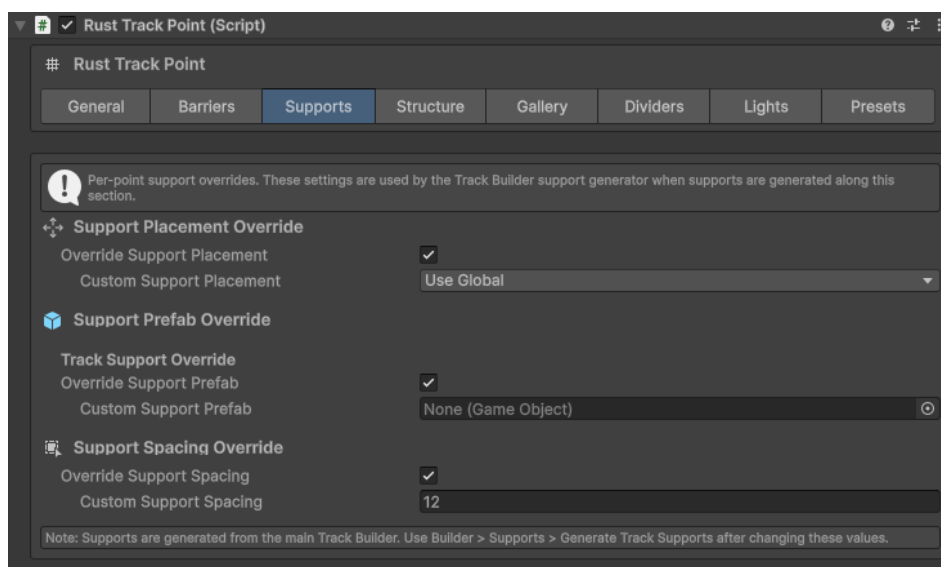
This allows different sections of the track to use unique support configurations.

Available overrides include:

Support Placement Override

Support Prefab Override

Support Spacing Override



Per-point overrides are useful when creating:

Bridges

Large elevated corners

Special track sections

Unique structural areas

Generate Supports

Generates supports using the current settings.

Use this button after configuring support placement and assigning a support prefab.

Clear Supports

Removes all generated supports from the scene.

Only generated support instances are removed.

The original prefab assets remain unchanged.

Best Practices

Use supports on elevated track sections to improve visual quality.

Increase support spacing for long straight sections.

Decrease support spacing for curves and complex areas.

Use custom support prefabs to match the visual style of your project.

Generate supports after the track layout has been finalized.

Common Uses

Floating Sci-Fi Tracks

Hover Racing Circuits

Bridges

Elevated Highways

Industrial Structures

Prototype Racing Environments

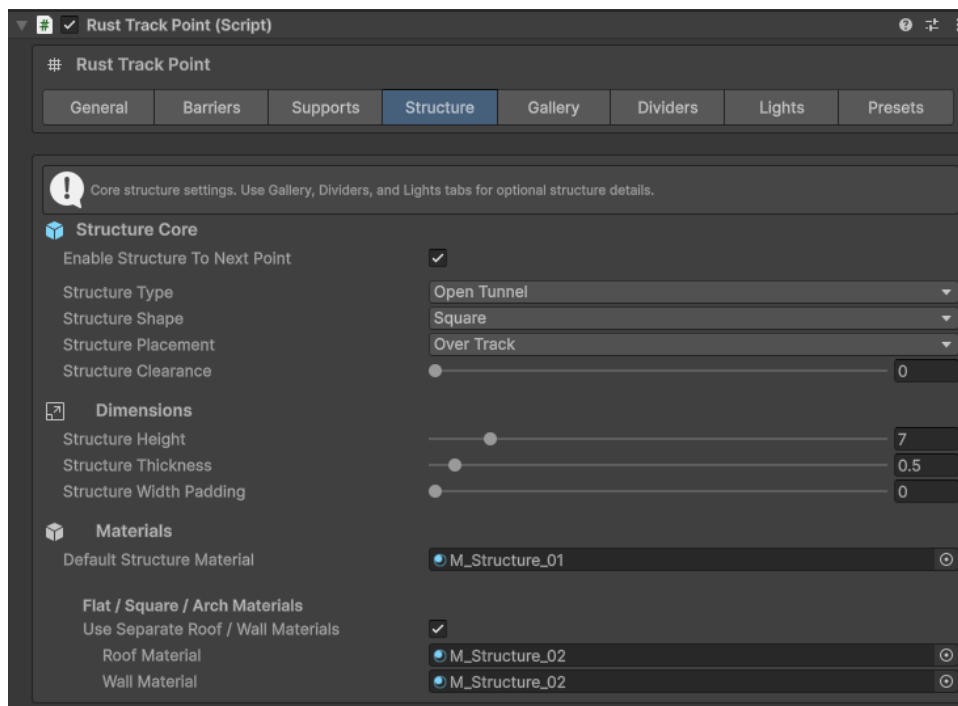
The Support System works seamlessly with barriers, structures, decorations, and visual themes, allowing complete track environments to be generated from a single track layout.

8. Structures

The Structure System allows you to generate enclosed or partially enclosed sections between Track Points.

Structures can be used to create tunnels, covered track sections, futuristic corridors, industrial environments, and other architectural elements that follow the track path automatically.

Structures are configured directly from individual Track Points and are generated between the selected Track Point and the next Track Point in the track sequence.



Structure To Next Point

Enable Structure To Next Point

Enables structure generation between the current Track Point and the next Track Point.

When enabled, the builder automatically creates the selected structure type along the segment.

This allows different sections of the same track to use completely different structure styles.

Structure Types

The Structure System supports multiple structure styles.

Open Tunnel

Creates a tunnel-like structure that follows the track path while maintaining an open internal driving space.

This is the most commonly used structure type for racing tracks.

Additional structure styles may be available depending on future updates and custom presets.

Structure Dimensions

Structure Height

Controls the vertical size of the generated structure.

Increasing this value creates taller structures.

Structure Thickness

Controls the thickness of the generated structure geometry.

Higher values create heavier and more solid-looking structures.

Structure Width Padding

Adds additional space between the track edges and the structure walls.

This setting is useful when creating wider tunnels or larger enclosed sections.

Structure Clearance

Structure Clearance determines the available driving space inside the structure.

Increasing clearance creates a more open interior.

Reducing clearance creates tighter enclosed sections.

Care should be taken to ensure vehicles can comfortably pass through the generated area.

Structure Materials

Structure materials control the appearance of generated geometry.

Wall Material

Material applied to the side walls.

Roof Material

Material applied to the roof section.

Separate materials allow different visual styles to be applied to different parts of the structure.

Examples include:

Concrete Walls with Metal Roof

Sci-Fi Walls with Emissive Roof

Industrial Panels with Custom Materials

Structure Placement

Structures automatically follow the generated track.

The system aligns geometry to the track direction and curvature, allowing complex layouts to be enclosed without manual modeling.

This makes it possible to create long tunnel sections in seconds.

Structure Presets

Structure Presets provide a fast way to configure commonly used structure layouts.

Presets automatically apply predefined settings to:

Height

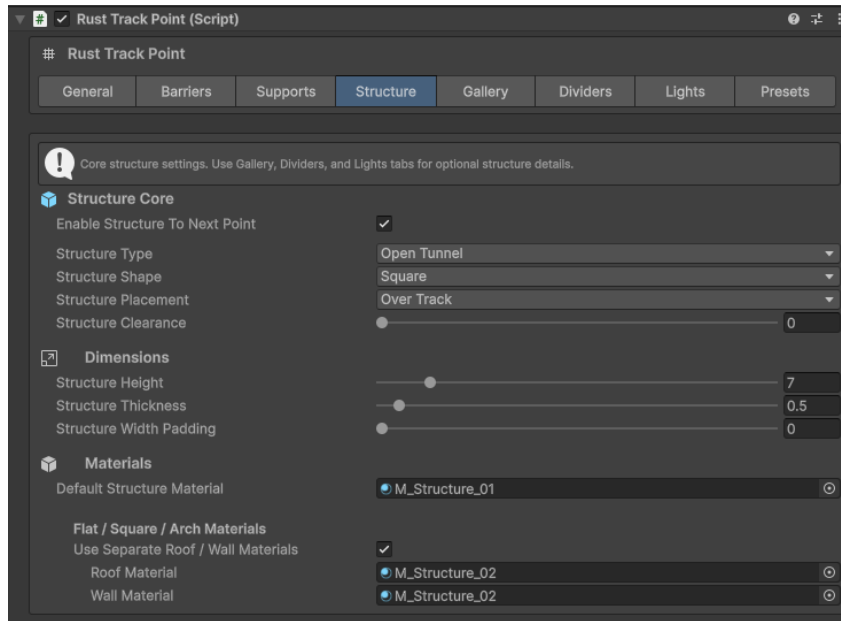
Thickness

Clearance

Materials

Other structure parameters

Available presets may vary depending on the current asset version.



Working With Structures

A structure only affects the segment between the selected Track Point and the next Track Point.

This allows individual track sections to use different architectural styles.

For example:

Open Area

Tunnel Section

Gallery Section

Tunnel With Lights

Tunnel With Dividers

All within the same track layout.

Recommended Workflow

1. Generate the track.
2. Select a Track Point.
3. Enable Structure To Next Point.
4. Configure structure dimensions.
5. Assign materials.
6. Generate or rebuild the track.
7. Review the generated section.
8. Add lights, dividers, or galleries if desired.

Common Uses

Racing Tunnels

Hover Racing Corridors

Industrial Track Sections

Underground Routes

Sci-Fi Transit Systems

Covered Track Segments

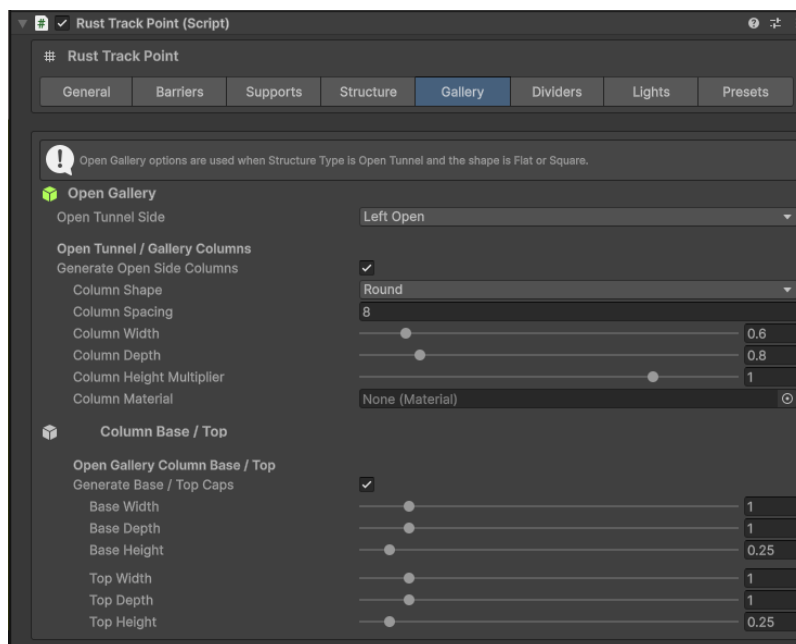
The Structure System serves as the foundation for several advanced features, including Galleries, Tunnel Dividers, and Tunnel Lights, which are covered in the following chapters.

9. Galleries

The Gallery System allows you to create partially enclosed track sections supported by structural columns.

Unlike tunnels, galleries remain open on one or both sides, making them ideal for elevated tracks, mountain roads, futuristic highways, and scenic racing environments.

Galleries are configured per Track Point and are generated between the selected Track Point and the next Track Point.



Open Side Gallery

Enable Open Side Gallery

Enables gallery generation for the selected track segment.

When enabled, the builder creates a structural section that follows the track path while leaving one or more sides open.

This creates a more open environment compared to fully enclosed tunnels.

Open Side Options

The Gallery System allows control over which side remains open.

Open Left Side

Leaves the left side of the gallery open.

Open Right Side

Leaves the right side of the gallery open.

Both options can be combined depending on the desired visual style.

Open sides provide visibility to surrounding scenery while maintaining structural coverage above the track.

Gallery Columns

Columns provide structural support for the gallery.

Enable Columns

Generates support columns along the gallery section.

Columns are automatically positioned according to the track layout and gallery settings.

Columns help create realistic architectural structures while adding visual detail.

Column Shape

Column Shape determines the appearance of generated columns.

Different shapes may be available depending on the selected configuration and future asset updates.

Choose a shape that best matches the visual style of your environment.

Column Spacing

Column Spacing controls the distance between generated columns.

Smaller values create denser column placement.

Larger values create wider gaps between supports.

This setting has a significant impact on the overall appearance of the gallery.

Column Materials

Column Material

Material applied to generated columns.

Using a separate material allows columns to have a different appearance from the walls and roof sections.

Common examples include:

Concrete Columns

Metal Supports

Sci-Fi Structures

Industrial Frameworks

Base and Top Caps

Base Caps

Adds decorative elements to the bottom of each column.

Top Caps

Adds decorative elements to the top of each column.

Caps are useful for improving the visual quality of generated structures and creating more polished architectural details.

Gallery Layouts

The Gallery System can be used to create many different styles of structures.

Examples include:

Elevated Highway Supports

Mountain Road Galleries

Industrial Corridors

Hover Racing Structures

Sci-Fi Track Sections

Scenic Open Tunnels

Combining Galleries With Other Systems

Galleries work seamlessly with:

Barrier System

Support System

Tunnel Lights

Tunnel Dividers

Decorations

Visual Themes

Combining these systems allows highly detailed track environments to be created with minimal manual setup.

Recommended Workflow

1. Select a Track Point.
2. Enable Open Side Gallery.
3. Configure which side should remain open.
4. Enable columns.
5. Adjust column spacing.
6. Assign materials.
7. Rebuild the track.
8. Review the generated structure.
9. Add lights or decorations if desired.

Best Practices

Use wider column spacing for high-speed track sections.

Use denser spacing for industrial or enclosed environments.

Combine galleries with lighting to improve visual readability.

Use open-sided galleries when you want to preserve views of the surrounding environment.

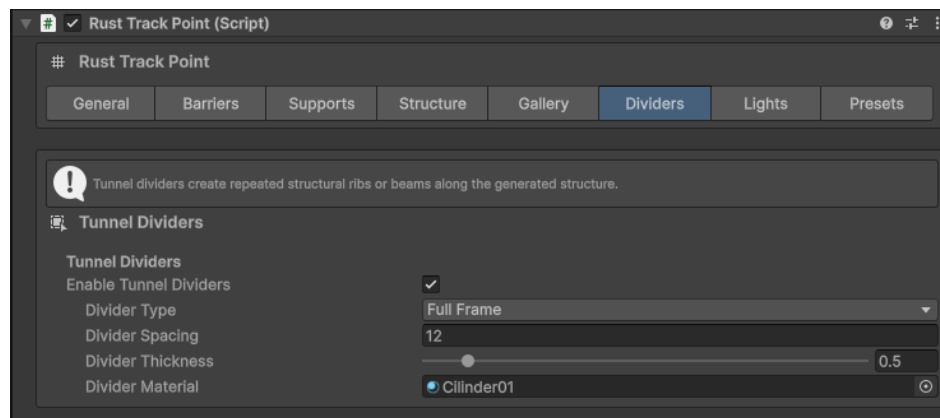
The Gallery System provides an excellent balance between structural detail and environmental visibility, making it one of the most versatile tools available within Rust and Speed – Track Builder.

10. Tunnel Dividers

Tunnel Dividers add structural frames inside generated tunnels and enclosed structures.

These dividers help break up long tunnel sections, improve visual variety, and create a more detailed architectural appearance.

Tunnel Dividers are generated automatically along the selected structure segment and follow the curvature of the track.



Enable Tunnel Dividers

Enable Tunnel Dividers

Activates divider generation for the selected structure segment.

When enabled, divider frames are placed automatically throughout the tunnel.

Dividers can be used in both straight and curved sections.

Divider Spacing

Divider Spacing controls the distance between generated divider frames.

Smaller values create a denser structure with more frames.

Larger values create a cleaner appearance with fewer dividers.

The ideal value depends on the visual style of the project.

For industrial and sci-fi environments, shorter spacing often produces the best results.

Divider Thickness

Divider Thickness controls the size of the generated divider geometry.

Increasing thickness creates heavier structural frames.

Reducing thickness creates a lighter appearance.

This setting should generally be proportional to the overall size of the structure.

Divider Material

Divider Material defines the material applied to generated divider frames.

Using a separate material allows the dividers to stand out from the tunnel walls and roof.

Common examples include:

Metal Frames

Painted Steel

Concrete Supports

Sci-Fi Energy Structures

Industrial Reinforcement Frames

Divider Alignment

Tunnel Dividers automatically align with:

Track Direction

Track Curvature

Structure Dimensions

This ensures the generated frames remain consistent throughout the entire tunnel section.

No manual positioning is required.

Visual Benefits

Tunnel Dividers help improve the appearance of long enclosed sections by:

Breaking repetitive geometry

Adding depth

Creating a stronger sense of scale

Improving environmental detail

Supporting lighting systems

Long tunnels generally benefit from divider placement.

Combining Dividers With Tunnel Lights

Tunnel Dividers work especially well when combined with Tunnel Lights.

Many developers place lights directly between divider sections to create a repeating visual pattern throughout the tunnel.

This combination can significantly improve the visual quality of enclosed track sections.

Recommended Workflow

1. Create a tunnel or enclosed structure.
2. Enable Tunnel Dividers.
3. Configure divider spacing.
4. Configure divider thickness.
5. Assign a material.
6. Rebuild the track.
7. Review the generated structure.
8. Adjust spacing if necessary.

Best Practices

Use closer divider spacing in large tunnels.

Use wider spacing in shorter structures.

Match divider materials with the overall environment theme.

Combine dividers with lighting for improved visual results.

Test divider spacing from gameplay camera distance rather than Scene View distance.

Common Uses

Sci-Fi Corridors

Industrial Tunnels

Hover Racing Structures

Maintenance Passages

Underground Racing Sections

Futuristic Transit Systems

Tunnel Dividers are a simple but effective way to increase the visual complexity of generated structures while maintaining a fully procedural workflow.

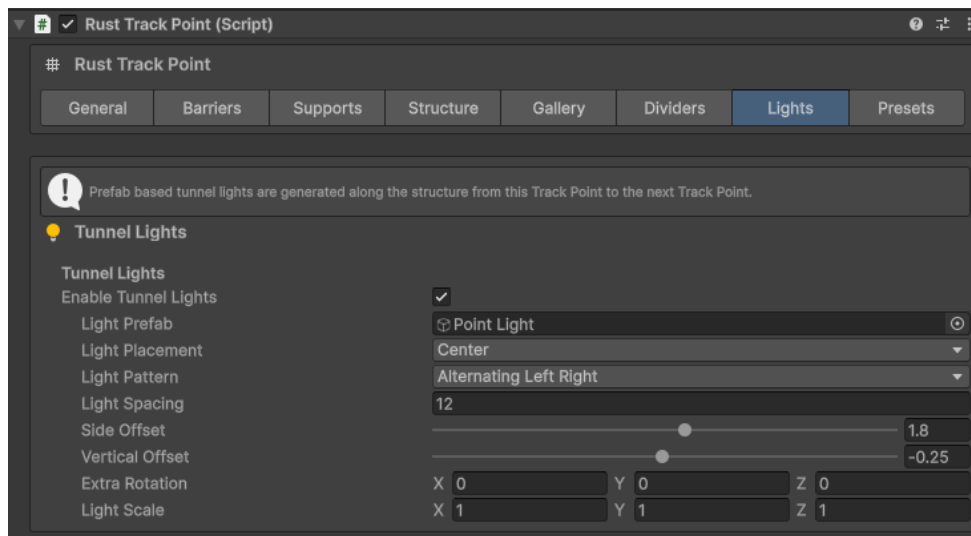
11. Tunnel Lights

The Tunnel Lights system automatically places light prefabs inside tunnels and enclosed structures.

This feature helps improve visibility, adds environmental detail, and creates a more immersive racing experience.

Lights are generated procedurally and follow the shape and direction of the track segment.

Tunnel Lights are configured per Track Point and affect the structure between the selected Track Point and the next Track Point.



Enable Tunnel Lights

Enable Tunnel Lights

Activates automatic light generation for the selected structure segment.

When enabled, the builder places light prefabs using the current placement settings.

Tunnel Lights can be used in tunnels, galleries, and enclosed structures.

Light Prefab

Light Prefab

Defines the prefab used when generating lights.

Any compatible Unity prefab can be used.

Typical examples include:

Point Lights

Spot Lights

Sci-Fi Light Fixtures

Industrial Lamps

LED Panels

Custom Lighting Systems

The prefab should already contain any required light components and visual elements.

Light Spacing

Light Spacing controls the distance between generated lights.

Smaller values create a denser lighting arrangement.

Larger values reduce the number of generated lights.

The optimal value depends on:

Track speed

Tunnel size

Light intensity

Visual style

Light Placement

The builder automatically aligns lights to the generated structure.

Lights follow:

Track Direction

Track Curvature

Structure Alignment

This ensures consistent placement throughout the entire section.

Side Offset

Side Offset controls the horizontal distance from the center of the structure.

Positive and negative values can be used to move lights closer to either side of the tunnel.

This is useful for creating:

Wall-Mounted Lights

Side Lighting

Asymmetrical Layouts

Custom Lighting Designs

Vertical Offset

Vertical Offset controls the height of generated lights relative to the structure.

Increasing this value moves lights higher.

Reducing this value moves lights closer to the driving surface.

This setting is commonly used when placing lights on the roof of a tunnel.

Rotation Offset

Rotation Offset allows additional rotation to be applied to generated lights.

This is useful when using custom light prefabs that require specific orientation adjustments.

Scale Multiplier

Scale Multiplier allows generated light prefabs to be scaled during placement.

This setting is useful when:

Using large structures

Creating oversized lighting systems

Matching different environment styles

Testing alternative visual looks

Alternating Placement

Alternating Placement allows lights to switch between left and right positions during generation.

This can create a more dynamic appearance and reduce repetitive patterns.

Alternating placement works particularly well in:

Sci-Fi Tunnels

Industrial Corridors

Maintenance Areas

Large Transit Structures

Light Patterns

Tunnel Lights support different placement patterns depending on the selected settings.

Examples include:

Centered Lights

Alternating Lights

Side-Mounted Lights

Continuous Lighting

Custom Patterns

Different patterns can dramatically change the atmosphere of a structure.

Combining Lights With Other Systems

Tunnel Lights work particularly well when combined with:

Structures

Galleries

Tunnel Dividers

Visual Themes

Decorations

Using multiple systems together creates more detailed and visually appealing environments.

Recommended Workflow

1. Create a structure or tunnel section.
2. Enable Tunnel Lights.
3. Assign a light prefab.
4. Configure spacing.
5. Adjust side and vertical offsets.
6. Rebuild the track.
7. Review the generated lighting.
8. Fine-tune placement if necessary.

Best Practices

Use larger spacing for high-speed track sections.

Use shorter spacing for enclosed environments.

Test lighting during Play Mode.

Ensure light intensity matches the visual theme.

Avoid excessive light counts in very large tunnels.

Use light prefabs that are optimized for performance.

Common Uses

Sci-Fi Racing Tracks

Industrial Corridors

Underground Routes

Transit Systems

Maintenance Tunnels

Hover Racing Environments

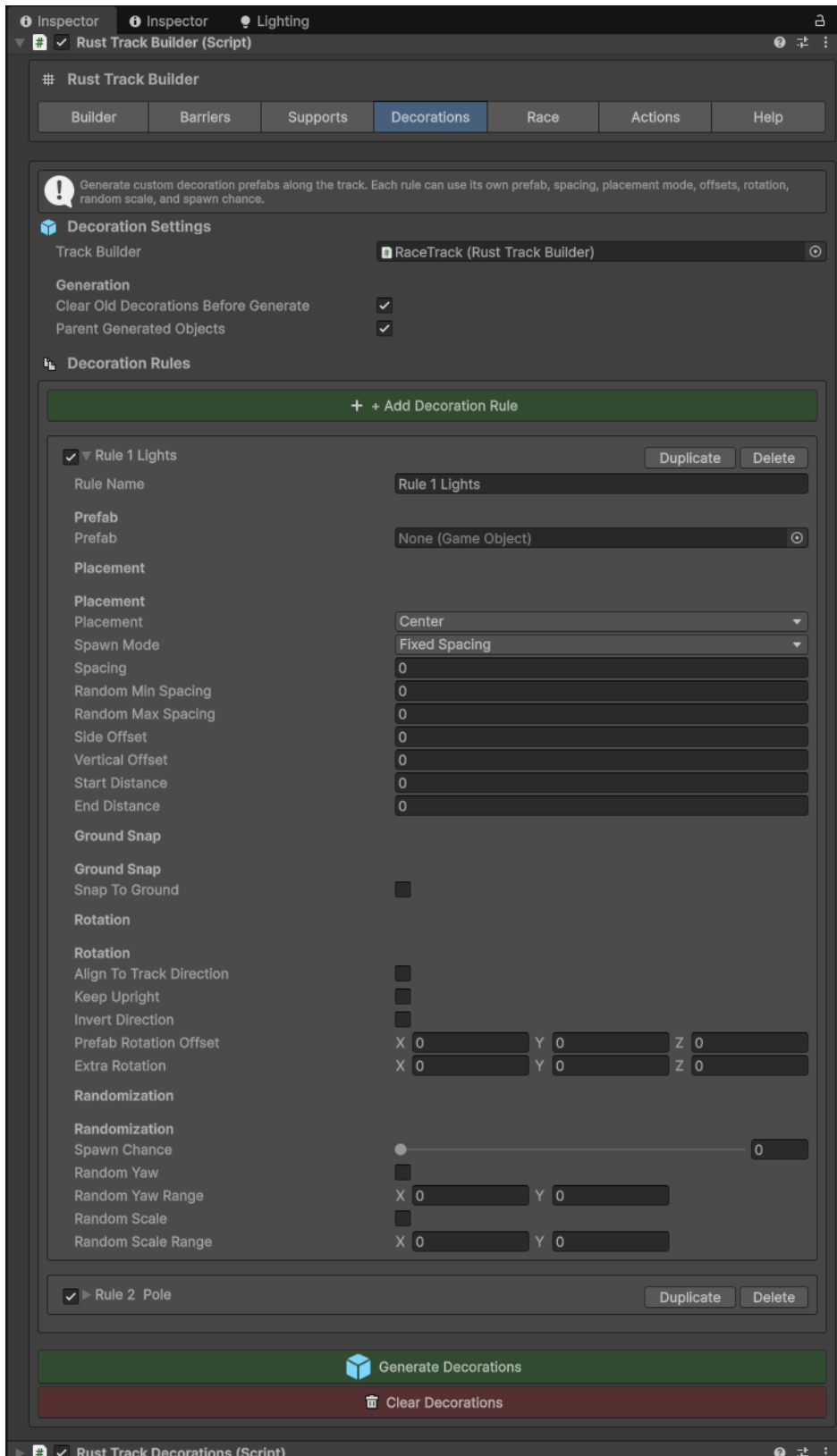
Tunnel Lights provide a fast and flexible way to improve visibility and add atmosphere to generated structures without requiring manual light placement.

12. Decorations

The Decorations system allows you to automatically place decorative prefabs along the generated track.

Decorations help improve the visual quality of the environment by adding detail, scale, and points of interest without requiring manual placement.

The system uses configurable placement rules that determine where and how decorative objects are generated.



Overview

Decorations are generated using one or more Decoration Rules.

Each rule defines:

- Which prefab will be placed
- Where it can be placed
- How often it appears
- How it aligns to the environment
- Randomization settings

Multiple rules can be combined to create varied and natural-looking environments.

Decoration Rules

Decoration Rules define the behavior of generated decorations.

Each rule can use different settings and prefabs.

Examples include:

Light Poles

Signs

Props

Environment Details

Sci-Fi Structures

Custom Prefabs

Rules are processed independently and can be combined freely.

Decoration Prefabs

Any compatible Unity prefab can be used as a decoration.

Included Decoration Prefab:

PoleLight

Custom prefabs can also be assigned to create unique environments.

Recommended prefabs include:

Street Lights

Sci-Fi Lamps

Signs

Industrial Props

Environmental Objects

Trackside Structures

Placement Settings

Placement Settings determine where decorations can appear.

The generator automatically follows the track path and places decorations according to the configured rules.

Common placement options include:

Track Edge Placement

Side Placement

Offset Placement

Custom Distance Settings

These settings allow decorations to remain aligned with the generated track.

Placement Distance

Placement Distance controls the spacing between generated decorations.

Smaller values create denser placement.

Larger values reduce the number of generated objects.

The correct value depends on:

Track Length

Prefab Size

Desired Visual Density

Environment Style

Ground Snap

Ground Snap automatically aligns decorations to the detected surface below them.

When enabled, decorations will follow terrain elevation and environmental geometry.

Ground Snap is recommended when placing decorations in outdoor environments.

Benefits include:

Improved placement accuracy

Reduced floating objects

Better terrain integration

Less manual adjustment

Alignment

Decorations can be aligned automatically using several options.

Align To Surface

Aligns objects to the detected ground surface.

Align To Track Direction

Aligns objects to the direction of the generated track.

These options help maintain consistent placement throughout the environment.

Rotation Settings

Rotation controls how generated decorations are oriented.

Available options may include:

Random Rotation

Track-Aligned Rotation

Surface-Aligned Rotation

Custom Rotation Offsets

These settings help reduce repetitive visual patterns.

Randomization

Randomization allows decorative elements to appear more natural.

Common randomization options include:

Position Variation

Rotation Variation

Scale Variation

Spawn Chance

Randomization is highly recommended when generating large environments.

Scale Variation

Scale Variation applies random size differences to generated objects.

This can help create a more organic and believable environment.

Small variations often produce the most realistic results.

Spawn Probability

Spawn Probability determines how frequently a decoration is generated.

Higher values increase object density.

Lower values create more selective placement.

This is useful when combining multiple Decoration Rules.

Multiple Decoration Rules

Using multiple rules allows a single track to contain different decorative elements.

Example:

Rule 1

Pole Lights

Rule 2

Signs

Rule 3

Industrial Props

Rule 4

Environmental Details

Combining rules creates richer and more varied environments.

Generate Decorations

Generates all decorations using the currently configured rules.

Use this button whenever decoration settings are modified.

Clear Decorations

Removes all generated decoration instances from the scene.

Only generated objects are removed.

The original prefabs remain unchanged.

Recommended Workflow

1. Generate the track.
2. Create one or more Decoration Rules.
3. Assign decoration prefabs.
4. Configure placement settings.
5. Enable Ground Snap if necessary.
6. Adjust randomization values.
7. Generate decorations.
8. Review the results.
9. Fine-tune spacing and density.

Best Practices

Use multiple decoration rules instead of a single rule.

Enable Ground Snap for outdoor environments.

Use moderate randomization values.

Keep decoration density appropriate for the track size.

Test placement from gameplay camera distance.

Use custom prefabs that match the selected visual theme.

Common Uses

Trackside Lighting

Street Furniture

Industrial Props

Sci-Fi Structures

Environmental Details

Hover Racing Decorations

Prototype Environment Building

The Decorations system allows large environments to be populated quickly while maintaining a procedural workflow and consistent visual style.

13. Race Prototyping Tools

Rust and Speed – Track Builder includes a collection of race prototyping tools designed to help developers quickly transform a generated track into a playable racing environment.

These tools are intended to accelerate testing and development by automatically creating common racing elements such as checkpoints and start positions.

The included tools are designed for prototyping and rapid setup. They can be used directly or integrated into custom racing systems.

Overview

The Race tab contains tools for:

- Automatic Checkpoint Generation
- Automatic Start Grid Generation
- Race Setup Helpers
- Automatic Reference Assignment

These features help reduce setup time and eliminate repetitive manual work.

Checkpoint System

The Checkpoint Generator automatically creates checkpoints along the generated track.

Checkpoints can be used for:

Lap Progression

Race Validation

Wrong Way Detection

Respawn Systems

Player Progress Tracking

The generated checkpoints follow the shape of the track and are automatically aligned to the driving direction.

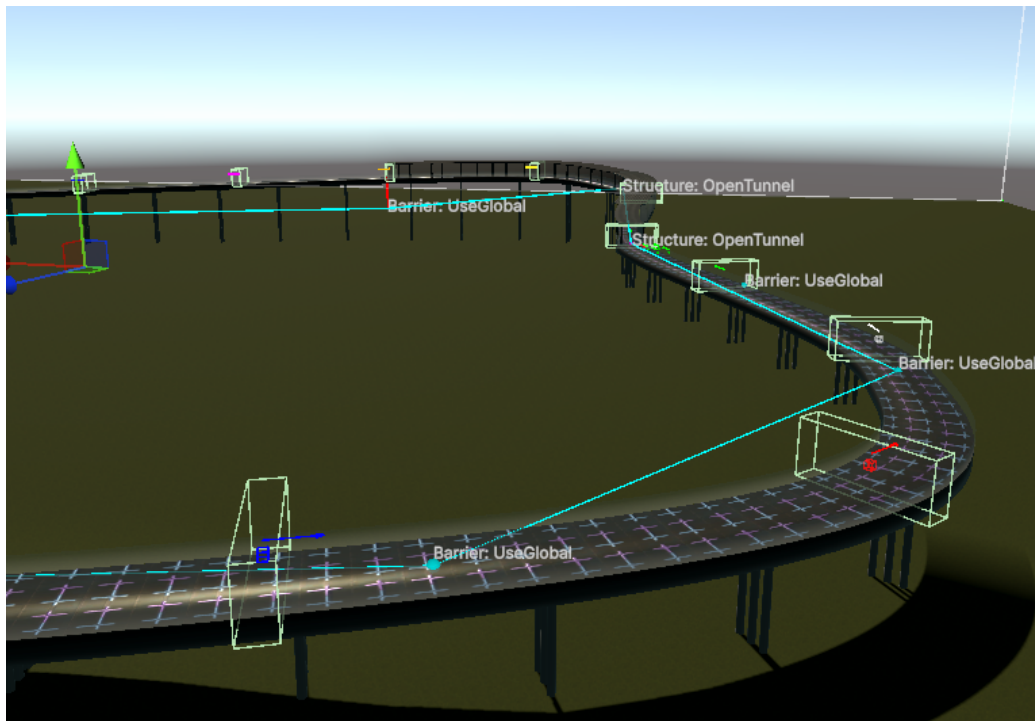
Generate Checkpoints

Generate Checkpoints

Creates checkpoints along the track path.

The builder calculates appropriate placement positions using the generated track layout.

Generated checkpoints can be regenerated at any time if the track changes.



Advanced Checkpoint Settings

Advanced Checkpoint Settings provide additional control over checkpoint generation.

Available settings may include:

Checkpoint Width

Checkpoint Height

Placement Offset

Spacing Controls

Automatic Naming

These settings help adapt checkpoints to different gameplay requirements.

Checkpoint Assignment

Assign Checkpoints

Automatically assigns generated checkpoints to the included race management tools.

This feature helps simplify race setup and reduces manual configuration.

Start Grid System

The Start Grid System automatically generates race starting positions.

Generated positions are aligned to the track direction and can be used immediately by player and AI vehicles.

The Start Grid is useful for:

Single Player Races

Multiplayer Prototypes

AI Testing

Track Validation

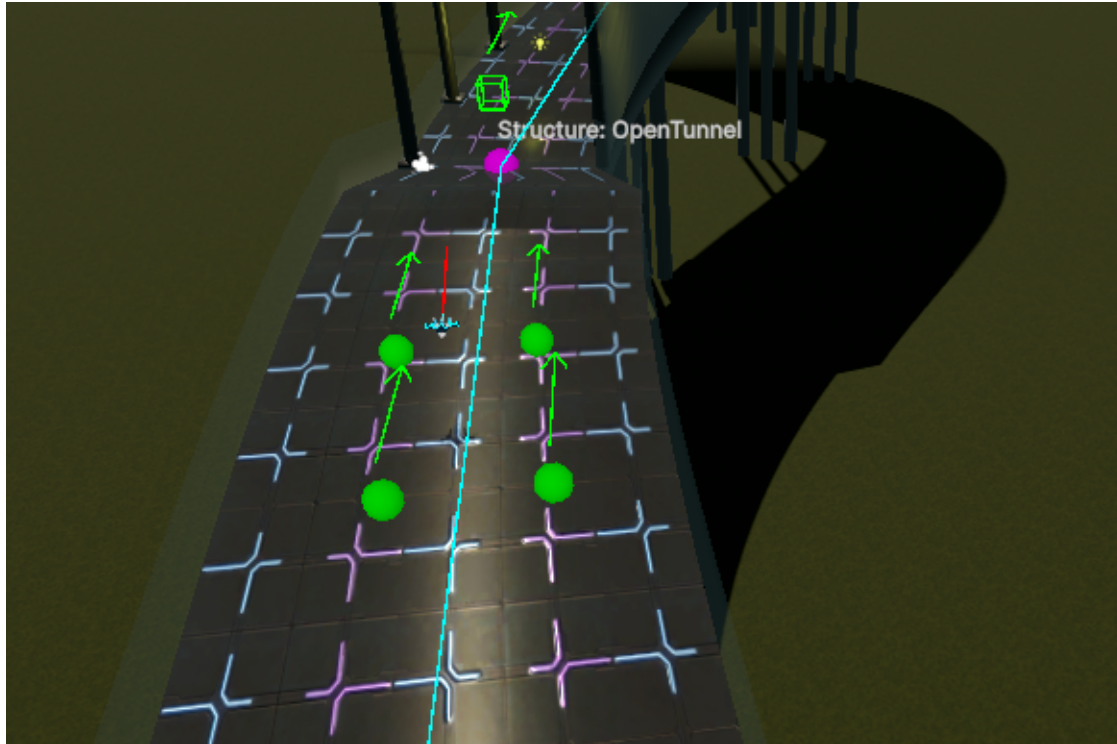
Gameplay Demonstrations

Generate Start Grid

Generate Start Grid

Creates a set of starting positions along the selected section of the track.

Generated positions automatically follow the orientation of the track.



Advanced Start Grid Settings

Advanced Start Grid Settings provide additional control over generated start positions.

Available settings may include:

Grid Rows

Grid Spacing

Vehicle Distance

Alignment Controls

Offset Adjustments

These settings help create different starting layouts depending on the game type.

Assign Start Grid

Assign Start Grid

Automatically assigns generated start positions to the race setup system.

This feature reduces manual drag-and-drop setup work.

Race Setup Helpers

Race Setup Helpers provide additional automation tools that assist with race configuration.

Depending on the current project setup, these tools can automatically connect generated objects to supported race systems.

These helpers are intended to speed up development and testing.

Validation Tools

The Validation section can be used to verify that the track contains the required elements for race testing.

Validation checks may include:

Track Generation Status

Checkpoint Availability

Start Grid Availability

Reference Verification

Missing Component Detection

Validation tools help identify setup issues before entering Play Mode.

Typical Workflow

1. Generate the track.
2. Generate checkpoints.
3. Generate the start grid.
4. Assign generated objects.
5. Run validation.
6. Press Play.

This workflow allows a fully playable prototype to be created within minutes.

Best Practices

Regenerate checkpoints after major track modifications.

Regenerate the start grid if the starting section changes.

Use validation tools before testing.

Verify checkpoint placement using the Scene View.

Keep checkpoint spacing appropriate for the track size and layout.

Important Notes

The Race Prototyping Tools are intended to accelerate development and testing.

They provide a quick way to create functional racing environments but are not intended to replace a complete racing framework.

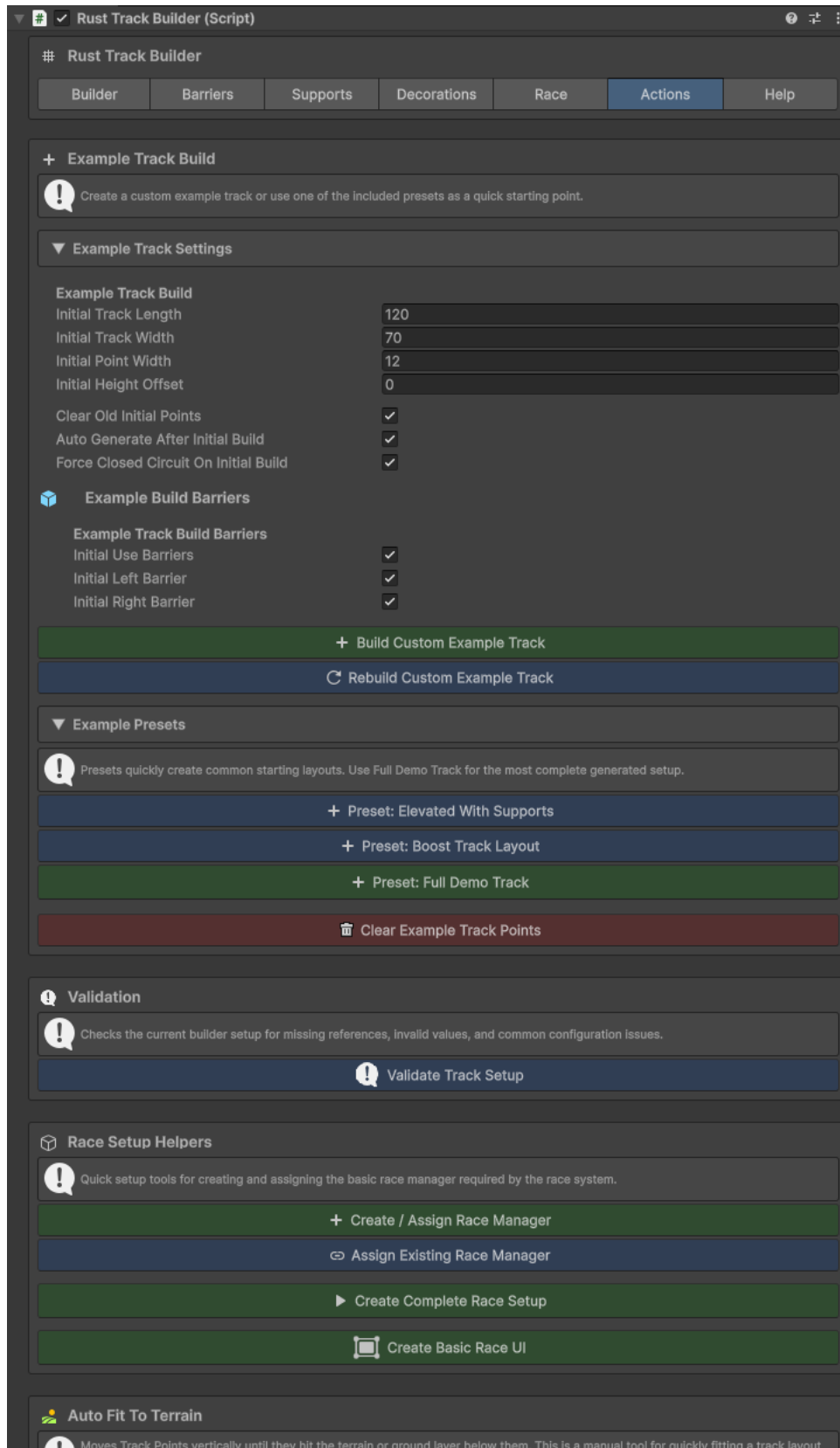
Developers are free to integrate the generated elements into their own custom race systems.

These tools are included to help transform a generated track into a playable racing prototype as quickly as possible.

14. Actions and Utilities

The Actions tab contains a collection of utility tools designed to accelerate track creation, testing, and scene setup.

These tools help automate common tasks and reduce the amount of manual work required when building tracks.



Example Track Builder

The Example Track Builder allows you to generate predefined track layouts for learning, testing, and rapid prototyping.

Example layouts can be used as a starting point for new projects or as references for understanding how the system works.

Available presets may vary depending on the current version of the asset.

Typical examples include:

Elevated Tracks

Support Demonstrations

Tunnel Examples

Feature Showcase Layouts

Complete Demo Tracks

Using an example layout is one of the fastest ways to begin working with the system.

Generate Example Track

Generate Example Track

Creates a complete set of Track Points using the selected preset.

Once generated, the layout can be modified freely.

The generated Track Points behave exactly the same as manually created Track Points.

Preset Selection

Preset Selection allows you to choose which example layout will be generated.

Each preset is designed to demonstrate different builder features.

Examples may include:

Basic Track Layout

Elevated Circuit

Support Demonstration

Tunnel Showcase

Full Feature Track

These layouts can be used as templates for your own projects.

Validation Tools

The Validation section helps identify common setup issues before entering Play Mode.

Validation can help verify:

Track Generation Status

Missing Track Points

Missing References

Checkpoint Availability

Start Grid Availability

General Builder Configuration

Running validation before testing can save time during development.

Validate Setup

Validate Setup

Checks the current builder configuration and reports potential issues.

If problems are detected, review the reported warnings and correct them before continuing.

Race Setup Helpers

Race Setup Helpers automate several common race configuration tasks.

These tools are intended to reduce repetitive setup work and improve workflow efficiency.

Depending on the current project setup, helpers may automatically assign:

Checkpoints

Start Positions

Race References

Supported Components

These tools are particularly useful when rebuilding tracks frequently during development.

Auto Fit To Terrain

Auto Fit To Terrain automatically adjusts Track Points to match the terrain height below them.

This tool is useful when creating tracks that follow natural landscapes.

Common uses include:

Mountain Roads

Off-Road Tracks

Terrain-Based Circuits

Prototype Environments

Outdoor Racing Games

Using Auto Fit To Terrain

1. Position Track Points approximately where the track should be located.
2. Open the Actions tab.
3. Click Auto Fit To Terrain.
4. Review the updated Track Point positions.
5. Regenerate the track.

The builder automatically adjusts the Track Points to better follow the terrain surface.

Point Editing Tools

Point Editing tools provide quick access to common Track Point operations.

These tools help speed up layout creation and modification.

Common operations include:

Add Point At End

Insert Point

Remove Point

Select Point

Reorder Points

These tools are especially useful when building large track layouts.

Workflow Recommendations

During early development:

1. Generate an example track.
2. Modify Track Points.
3. Generate the track.
4. Add barriers and supports.
5. Generate checkpoints and start positions.
6. Test gameplay.
7. Refine the layout.

This workflow allows tracks to be created and tested very quickly.

Best Practices

Use example layouts to learn the system.

Run validation before entering Play Mode.

Use Auto Fit To Terrain when working with landscapes.

Generate race elements only after finalizing the track layout.

Keep Track Point organization clean and easy to manage.

The Actions and Utilities tab is designed to streamline the development process and provide quick access to the most commonly used workflow tools.

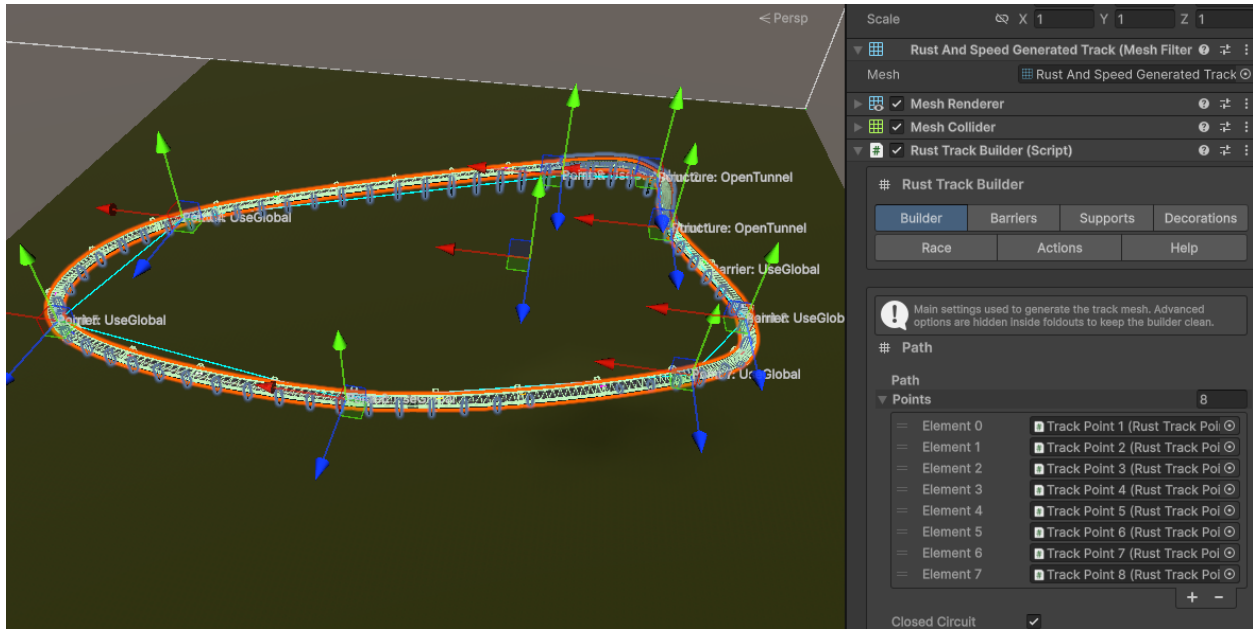
15. Track Points

Track Points are the foundation of Rust and Speed – Track Builder.

Every generated track is created from a sequence of Track Points placed in the Scene View.

The builder uses the position and settings of each Track Point to determine the final track layout.

Track Points can also override many of the global settings found in the Builder component, allowing individual sections of the track to behave differently.



Overview

Each Track Point represents a location along the track path.

Track geometry is generated between consecutive Track Points in the order they appear within the Builder.

Track Points can be used to:

- Define track layout

- Control width

- Create ramps

- Adjust banking

- Override barriers

- Override supports

- Create structures

- Generate galleries

- Add tunnel lights

- Apply structure presets

This provides a high level of control without requiring manual modeling.

Width Override

Enable Width Override

Allows the selected Track Point to use a custom width value.

When disabled, the global track width is used.

Custom Width

Defines the width used at the selected Track Point.

When Width Smoothing is enabled, transitions between different widths are blended automatically.

Common uses include:

Wide Corners

Narrow Passages

Arena Sections

Transition Areas

Point Type

Point Type determines how the selected Track Point behaves.

Different point types can be used to create specialized track sections.

Available options may vary depending on the current version of the asset.

Typical examples include:

Standard

Ramp

Jump

Special Track Sections

Point types help define the intended behavior of a specific area of the track.

Ramp Settings

Ramp settings allow Track Points to create jumps and elevation changes.

Ramp Intensity

Controls how aggressively the track rises or falls.

Ramp Length

Controls the transition distance used when generating the ramp.

These settings can be used to create:

Jumps

Launch Sections

Elevation Changes

Hover Racing Features

Banking Override

Track Points can override the global banking configuration.

Enable Banking Override

Allows custom banking values for the selected Track Point.

Custom Bank Angle

Defines the banking angle applied to the track near the selected point.

Positive values bank in one direction.

Negative values bank in the opposite direction.

Banking overrides are useful for:

Hairpin Corners

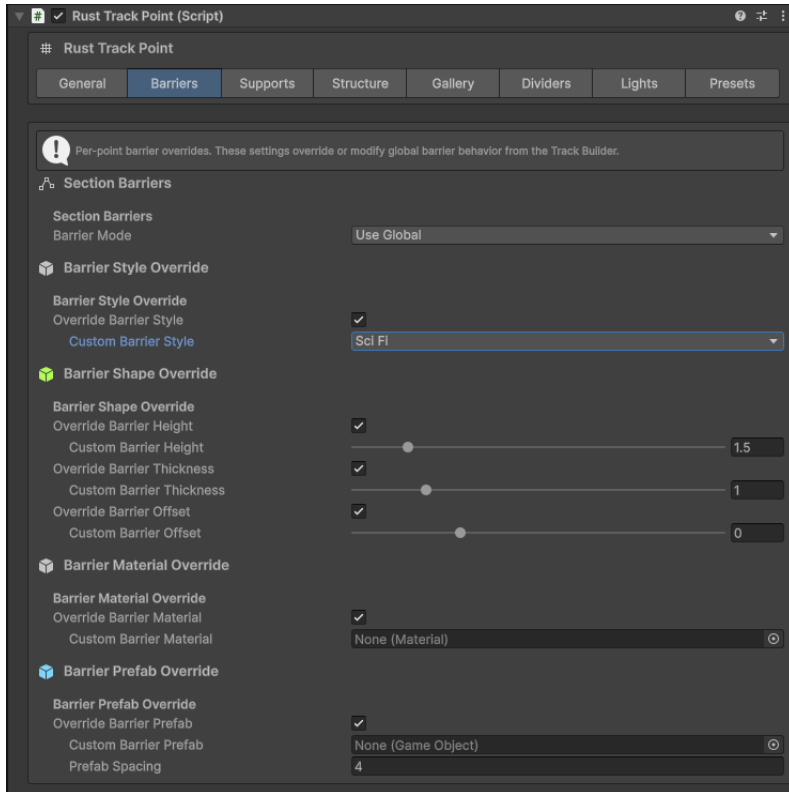
High-Speed Turns

Special Track Sections

Signature Racing Features

Barrier Overrides

Barrier settings can be customized for individual track segments.



Available overrides include:

Barrier Style Override

Barrier Height Override

Barrier Thickness Override

Barrier Offset Override

Barrier Material Override

Barrier Prefab Override

Prefab Spacing Override

These overrides affect the segment between the selected Track Point and the next Track Point.

Barrier overrides make it possible to create unique sections without modifying the global barrier settings.

Common examples include:

Guard Rails

Sci-Fi Walls

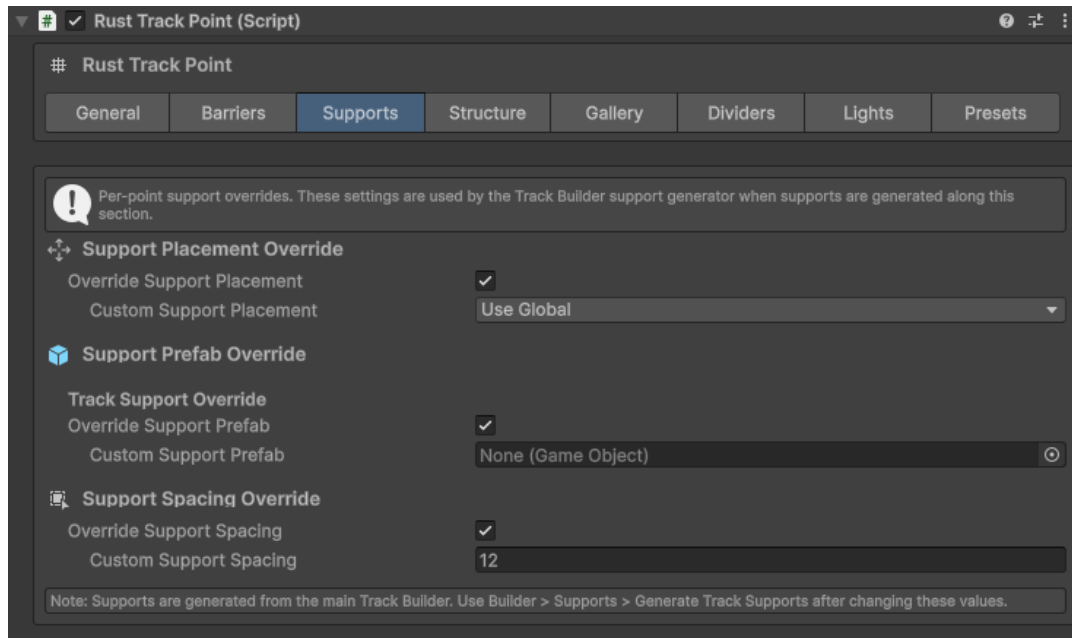
Industrial Barriers

Open Sections

Special Event Areas

Support Overrides

Support generation can also be customized per Track Point.



Available overrides include:

Support Placement Override

Support Prefab Override

Support Spacing Override

Support overrides are useful when:

Creating bridges

Supporting large corners

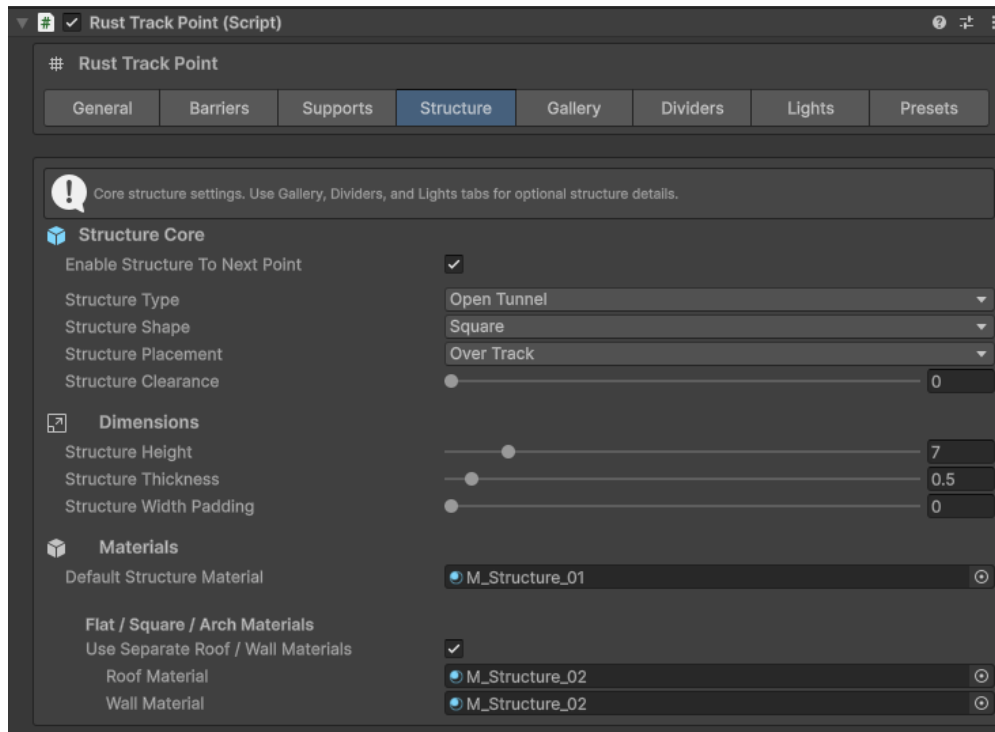
Building elevated sections

Creating unique structural features

These overrides affect only the selected segment.

Structure Overrides

Track Points are used to control structure generation.



Available structure settings include:

Structure To Next Point

Structure Height

Structure Thickness

Structure Width Padding

Structure Clearance

Wall Material

Roof Material

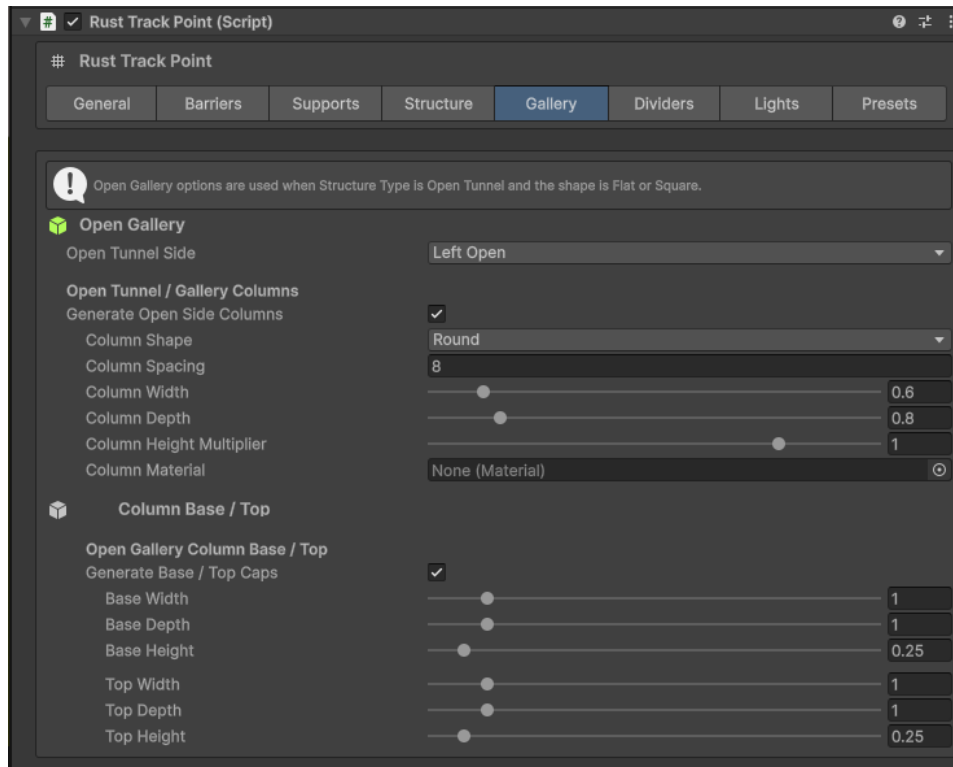
Structure Presets

Structures are generated only between the selected Track Point and the next Track Point.

This allows different sections of the same track to use completely different architectural styles.

Gallery Overrides

Track Points can create gallery sections.



Gallery options include:

Open Side Gallery

Open Left Side

Open Right Side

Column Generation

Column Materials

Column Spacing

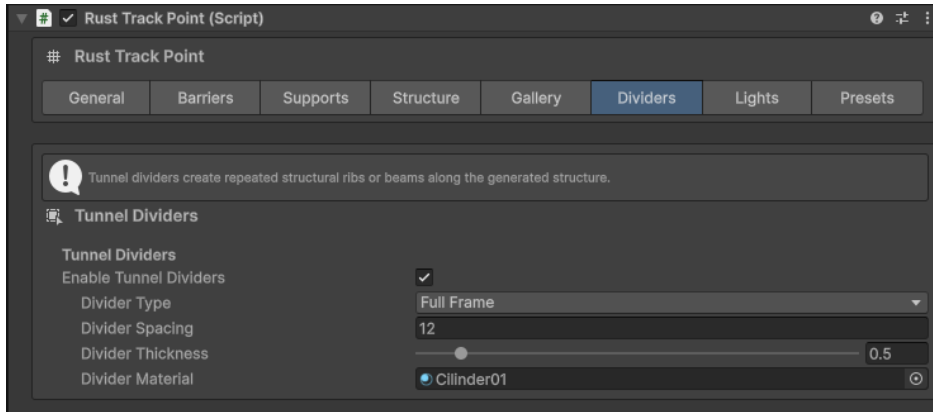
Base Caps

Top Caps

These settings provide additional architectural variation throughout the track.

Tunnel Dividers

Track Points can enable divider generation for individual structure segments.



Available settings include:

Divider Spacing

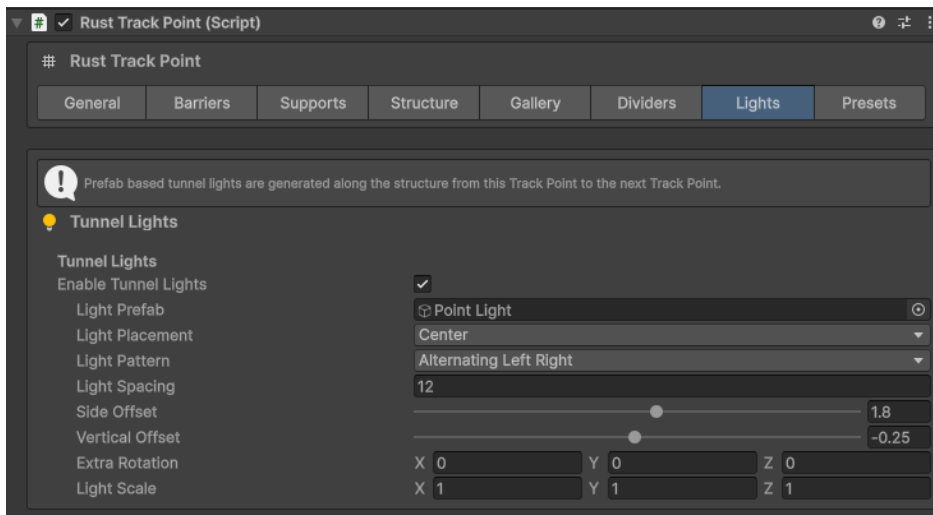
Divider Thickness

Divider Material

Divider generation can be enabled only where needed.

Tunnel Lights

Track Points control tunnel light generation.



Available settings include:

Light Prefab

Light Spacing

Side Offset

Vertical Offset

Rotation Offset

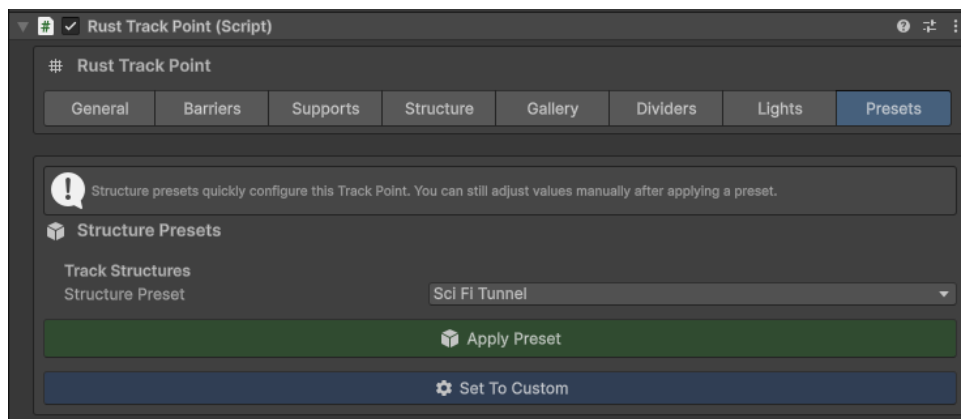
Scale Multiplier

Alternating Placement

This allows each tunnel section to use a different lighting style.

Structure Presets

Structure Presets provide a quick way to configure common structure layouts.



Presets automatically configure:

Dimensions

Clearance

Materials

Structure Settings

This significantly reduces setup time when creating complex environments.

Working With Track Points

A typical workflow is:

1. Create Track Points.
2. Adjust the track layout.
3. Configure width and banking.
4. Generate the track.

5. Add barriers and supports.
6. Configure structures.
7. Add lights and decorations.
8. Generate race elements.
9. Test and refine.

Track Points are the primary tool used throughout the entire asset and provide the flexibility needed to create a wide variety of racing environments.

16. Snap Objects

The Snap Objects system allows GameObjects to be automatically aligned to the generated track.

This tool is useful when placing objects that need to follow the track surface, direction, or elevation without requiring manual adjustments.

Common examples include:

Checkpoints

Signs

Lights

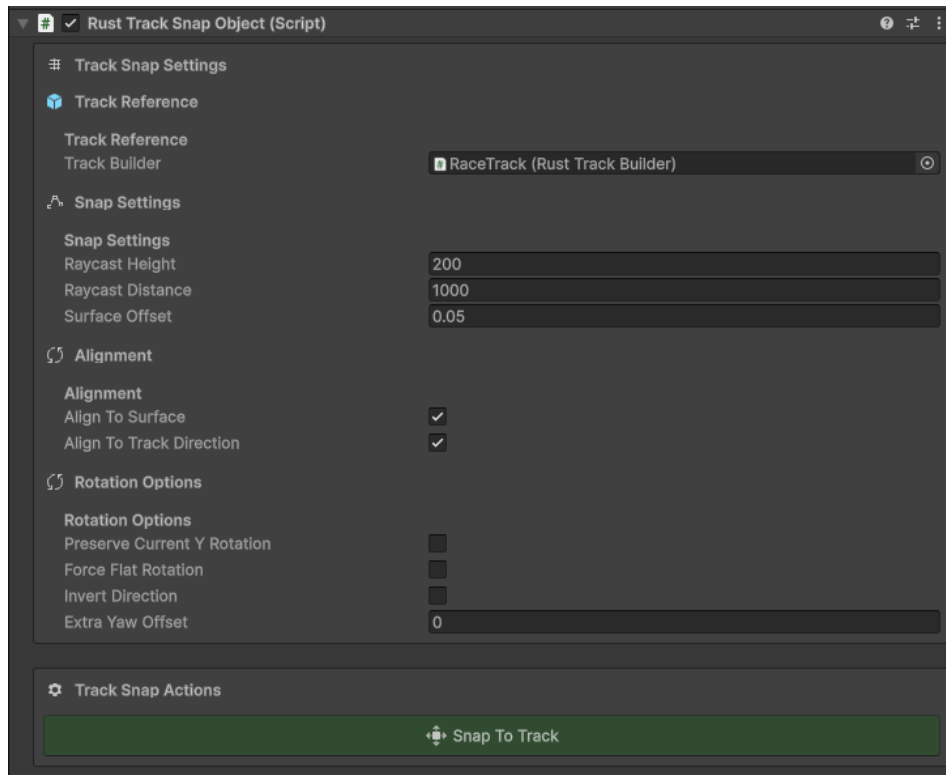
Props

Decorative Elements

Gameplay Objects

Custom Prefabs

The Snap Object component can be added to any GameObject and used at any time during development.



Overview

The Snap Object system uses raycasts and track information to determine the correct position and orientation of an object relative to the generated track.

The object can be aligned to:

Track Surface

Track Direction

Track Elevation

Track Slope

This allows objects to remain visually consistent with the track geometry.

Track Reference

Track Builder

Reference to the Rust Track Builder used by the component.

The Snap Object system requires a valid Track Builder reference to determine where and how objects should be aligned.

Snap Settings

Snap Settings control how the component searches for the track surface.

Raycast Height

Raycast Height determines the starting position of the raycast above the object.

Higher values can help when snapping objects in large environments.

Raycast Distance

Raycast Distance controls how far the component searches for the track.

If snapping fails, increasing this value may help locate the track surface.

Surface Offset

Surface Offset adds a small distance between the object and the detected surface.

This setting is useful when:

Avoiding clipping

Positioning props above the track

Adjusting object placement

Creating custom visual effects

Alignment Settings

Alignment settings determine how the object reacts to the detected track.

Align To Surface

Aligns the object to the track surface angle.

When enabled, the object follows track slopes and banking automatically.

This is useful for:

Lights

Signs

Props

Trackside Objects

Align To Track Direction

Aligns the object to the direction of the track.

When enabled, the object automatically faces the same direction as the track.

This is useful for:

Checkpoints

Directional Signs

Gameplay Objects

Custom Markers

Rotation Options

Rotation Options provide additional control over the final orientation.

Preserve Current Y Rotation

Maintains the current Y-axis rotation of the object.

This allows certain objects to keep their original facing direction while still snapping to the track.

Force Flat Rotation

Forces the object to remain level.

This can be useful when snapping objects that should not tilt with the track.

Invert Direction

Reverses the calculated track direction.

This is useful when placing objects that should face the opposite direction of travel.

Extra Yaw Offset

Applies an additional rotation offset after alignment.

This setting is commonly used when custom prefabs require fine adjustment.

Snap To Track

Snap To Track

Performs the snapping operation immediately.

When pressed, the object is repositioned and reoriented using the current settings.

The operation can be repeated at any time.

Recommended Workflow

1. Create or select an object.
2. Add the RustTrackSnapObject component.
3. Assign the Track Builder reference.
4. Configure alignment options.
5. Click Snap To Track.
6. Review the result.
7. Adjust offsets if necessary.

This workflow allows objects to be placed accurately in only a few seconds.

Common Uses

Checkpoints

Start Positions

Trackside Signs

Lighting Fixtures

Decorative Props

Environmental Objects

Interactive Gameplay Elements

Custom Prefabs

Best Practices

Use Align To Track Direction for directional objects.

Use Align To Surface for props that should follow slopes.

Use Surface Offset to prevent clipping.

Test object placement from gameplay camera distance.

Adjust Extra Yaw Offset when using custom prefabs.

Use Force Flat Rotation when snapping objects that should remain level.

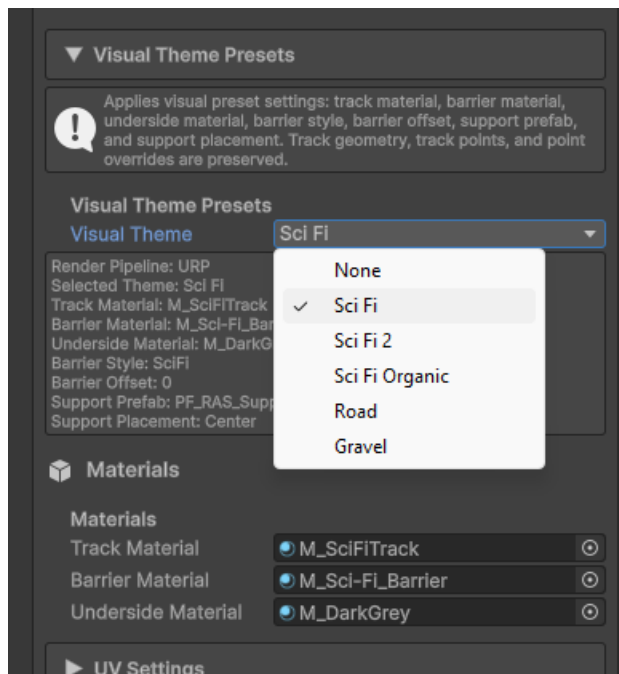
The Snap Objects system provides a simple and efficient way to place content accurately along the generated track while maintaining a fully procedural workflow.

17. Visual Themes

Visual Themes provide a quick way to change the appearance of generated tracks without manually configuring materials.

Themes automatically apply predefined visual settings and materials, allowing tracks to be styled consistently with only a few clicks.

Visual Themes are ideal for rapid prototyping and can also serve as a starting point for custom material setups.



Overview

A Visual Theme applies a predefined collection of materials and appearance settings to the generated track.

Themes affect the visual presentation of the track while preserving the existing layout and geometry.

Switching between themes does not modify:

Track Points

Track Layout

Structures

Barriers

Supports

Race Elements

Only the visual appearance changes.

Included Themes

Rust and Speed – Track Builder includes several built-in themes.

Sci Fi

The Sci Fi theme is designed for futuristic racing environments.

This theme is suitable for:

Hover Racers

Space Tracks

Futuristic Circuits

Arcade Racing Games

Science Fiction Projects

Sci Fi uses materials designed to create a clean futuristic appearance.

Sci Fi 2

Sci Fi 2 provides an alternative futuristic visual style.

This theme offers a different material combination while maintaining a science-fiction aesthetic.

Sci Fi 2 is useful when creating visual variety across multiple tracks.

Sci Fi Organic

Sci Fi Organic combines futuristic elements with softer and more natural visual characteristics.

This theme is useful for:

Alien Environments

Experimental Facilities

Organic Structures

Unique Science Fiction Settings

Road

The Road theme provides a traditional racing surface.

This theme is suitable for:

Street Racing

Circuit Racing

Prototype Racing Games

Realistic Racing Projects

Road materials create a familiar asphalt-style appearance.

Gravel

The Gravel theme provides a rougher and less refined track surface.

This theme is useful for:

Off-Road Racing

Prototype Tracks

Industrial Environments

Temporary Track Layouts

Terrain-Based Racing Games

Applying a Theme

To apply a theme:

1. Open the Builder tab.
2. Expand the Visual Theme Presets section.
3. Select a theme from the dropdown list.
4. Rebuild the track if necessary.

The selected theme is applied automatically.

Custom Materials

Although the included themes provide quick setup options, all generated materials can be replaced with custom materials.

Developers can assign their own:

Track Materials

Barrier Materials

Structure Materials

Support Materials

Decoration Materials

This allows complete control over the final appearance of the environment.

Using Themes During Development

Many developers use themes during different stages of development.

Prototype Phase

Use any theme to quickly visualize the track.

Testing Phase

Use themes to evaluate visibility and readability.

Production Phase

Replace materials with project-specific assets if desired.

Themes provide a fast and convenient starting point regardless of project size.

Best Practices

Select a theme early in development to establish a visual direction.

Use Sci Fi themes for hover racing and futuristic environments.

Use Road for traditional racing projects.

Use Gravel for off-road or prototype environments.

Replace materials with custom assets when additional visual customization is required.

Themes can be changed at any time without affecting the generated track layout.

Theme Compatibility

All included themes are compatible with:

Track Generation

Barrier System

Supports

Structures

Galleries

Tunnel Dividers

Tunnel Lights

Decorations

Race Prototyping Tools

This ensures a consistent appearance throughout the generated environment.

Visual Themes provide one of the fastest ways to transform a newly generated track into a visually appealing environment while maintaining a fully procedural workflow.

18. Frequently Asked Questions (FAQ)

This section answers some of the most common questions about Rust and Speed – Track Builder.

Can I use the asset for non-racing games?

Yes.

Although the asset is designed primarily for racing games, it can also be used to create roads, paths, walkways, elevated platforms, transit routes, and other track-like environments.

Does the asset generate meshes automatically?

Yes.

The generated track mesh is created automatically from the Track Points placed in the scene.

The builder also generates mesh colliders and UV mapping.

Can I create open and closed tracks?

Yes.

Open tracks and closed circuits are both supported.

Enable the Closed Circuit option to connect the final Track Point back to the first Track Point.

Can I change the width of the track?

Yes.

Track width can be configured globally from the Builder tab.

Individual Track Points can also use Width Overrides to create wider or narrower sections.

Can different sections use different widths?

Yes.

Width Overrides allow specific Track Points to use custom width values.

When Width Smoothing is enabled, transitions between widths are blended automatically.

Can I use my own materials?

Yes.

All generated materials can be replaced with custom Unity materials.

This includes:

Track Materials

Barrier Materials

Structure Materials

Support Materials

Decoration Materials

Can I use my own prefabs?

Yes.

The asset supports custom prefabs for:

Barriers

Supports

Tunnel Lights

Decorations

Snap Objects

Custom prefabs can be assigned through the appropriate settings panels.

Can I create tunnels?

Yes.

The Structure System supports tunnel generation between Track Points.

Tunnel dimensions, materials, and appearance can be customized.

Can I create open-sided structures?

Yes.

The Gallery System allows structures to remain open on one or both sides while still providing roof coverage and structural support.

Can I add lights to tunnels?

Yes.

The Tunnel Lights system automatically places light prefabs along selected structure segments.

Spacing, offsets, and placement behavior can be customized.

Can I place decorations automatically?

Yes.

The Decorations system supports procedural placement of decorative prefabs using configurable rules.

Multiple decoration rules can be combined within the same track.

Can I generate checkpoints automatically?

Yes.

The Race Prototyping Tools include automatic checkpoint generation.

Generated checkpoints follow the track layout and orientation.

Can I generate starting positions automatically?

Yes.

The Start Grid system automatically generates aligned starting positions along the track.

Can Track Points use different settings?

Yes.

Track Points support overrides for:

Width

Banking

Barriers

Supports

Structures

Tunnel Lights

Gallery Sections

Structure Presets

This allows different sections of the same track to behave differently.

Can I modify the generated track after creation?

Yes.

Track Points can be moved, added, removed, or modified at any time.

Simply rebuild the track after making changes.

Does the asset work with URP?

Yes.

The asset has been tested with Universal Render Pipeline (URP).

Does the asset work with HDRP?

Yes.

The asset has been tested with High Definition Render Pipeline (HDRP).

Is programming knowledge required?

No.

The asset is designed to be used directly through the Unity Inspector.

Most workflows can be completed without writing code.

Can I use the generated track with my own racing system?

Yes.

The generated track is independent of any specific racing framework.

You are free to integrate it with your own gameplay systems.

Does the asset include a complete racing framework?

No.

Rust and Speed – Track Builder focuses on track creation and race prototyping tools.

Developers are free to integrate the generated content into their own racing systems.

Can I use the asset in commercial projects?

Yes.

Assets purchased through the Unity Asset Store can be used according to the Unity Asset Store license agreement.

Always review the latest Unity licensing terms for complete details.

Where can I get support?

Support information can be found in the Support section of this documentation.

If you experience issues or have questions, please contact support using the information provided there.

19. Support

If you encounter issues while using Rust and Speed – Track Builder, please review the Troubleshooting and FAQ sections before contacting support.

Many common setup issues can be resolved by verifying builder settings, regenerating the track, or rebuilding generated content.

Support Email

For technical support, bug reports, or general questions, contact:

hello@2pointsoft.com

Official Website

Additional information, updates, tutorials, and future announcements may be available at:

<https://2pointsoft.com/rust-and-speed-track-builder/>

Before Contacting Support

When reporting an issue, please include as much information as possible.

Helpful information includes:

Unity Version

Render Pipeline Used

Asset Version

Description of the Issue

Steps to Reproduce

Screenshots

Console Errors

Providing detailed information helps reduce response times and improves issue resolution.

Feature Requests

Feedback and feature requests are always welcome.

Suggestions from users help guide future improvements and updates to the asset.

When submitting a feature request, please provide:

A description of the requested feature

The problem it solves

A possible use case

This information helps evaluate future development priorities.

Bug Reports

If you discover a bug, please include:

A clear description of the issue

Steps required to reproduce it

Expected behavior

Actual behavior

Screenshots if applicable

Console errors if applicable

The more information provided, the easier it is to investigate and resolve the issue.

Asset Updates

Rust and Speed – Track Builder may receive updates that include:

New Features

Improvements

Bug Fixes

Workflow Enhancements

Performance Optimizations

Documentation Updates

Users are encouraged to keep the asset updated to benefit from the latest improvements.

20. Version History

Version 1.0

Initial Release

Included Features:

Procedural Track Generation

Track Point Workflow

Open and Closed Circuit Support

Width Smoothing

Natural Curves

Track Banking

Visual Theme Presets

Barrier System

Prefab Barrier Support

Barrier Colliders

Track Supports

Structure System

Gallery System

Tunnel Dividers

Tunnel Lights

Decoration Rules

Race Prototyping Tools

Checkpoint Generation

Start Grid Generation

Auto Fit To Terrain

Snap Objects

Example Track Generator

Validation Tools

Support Prefab Integration
Decoration Prefab Integration
URP Compatibility
HDRP Compatibility
Documentation

Future Updates

Future updates may include improvements, optimizations, and additional features based on user feedback and ongoing development goals.

New functionality will be documented in future versions of this section.

Thank You

Thank you for purchasing Rust and Speed – Track Builder.

I truly appreciate your support and the trust you have placed in this asset.

My goal with Rust and Speed – Track Builder is to provide a fast, flexible, and enjoyable workflow for creating racing tracks and playable environments directly inside Unity. Whether you are building a prototype, an indie game, or a larger production, I hope this tool helps you save time and focus on creating great gameplay experiences.

If you have any questions, suggestions, or encounter any issues while using the asset, please do not hesitate to get in touch. User feedback is extremely valuable and helps guide future improvements and updates.

Thank you again for your support.

I wish you the best with your project and hope you enjoy using Rust and Speed – Track Builder.

Happy track building!

2 Point Soft

Support: hello@2pointsoft.com

Website: <https://2pointsoft.com/rust-and-speed-track-builder/>

Document End