

# Balyo Road Editor - Release Notes

# Road Editor Release Notes

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Useful links:

- [User Guide](#)
- [Tutorial for Simulation](#)
- [Test reports](#)

## ROAD EDITOR 2.38.0

2025-01-30/ BalyoSimulation\_4.19.0\_v1.3

### Features

- #56345 - When defining flows for the simulation, add to the Check Flows feature, a detailed report that gathers statistics about the possible itineraries per flow and per robot model. It would allow one to identify if there are outliers (from a missing turn for example).  
This report displays statistics about **each individual step** of the flows but also statistics about itineraries from taxi to the first step of the flows.

### Changes

- #65492 - Improve the performance of the Check Flow functionality:
  - Calculate only one itinerary per column of rack as the other levels will have the same itinerary for the robot.
  - If an itinerary from a taxi is successful, do not check the others. Except if one requests to retrieve the check flow report with more statistics.
  - Ensure that all coordinates are calculated in advance in a cache. It generates a loss of time during the initialization but a significant gain in execution.
  - Calculate only the itineraries of the taxi corresponding to the assigned robots.

After this refactoring, the total time spent on this feature is reduced (up to 50% during validation tests). However, it can still take time depending on the size of the project and the number of itineraries to check.

- #62983 - When opening a collaborative room, the trigger configuration for the simulation is now also pulled automatically. The expected behavior now:
  - the triggers states (enable/disable) are shared across all users in a room

- except when one is using the simulation configuration tool.
- Once the user leaves the simulation tool, the enabled triggers (changed by teammates) are synchronized back across to him.
- Advantage: it keeps the ability to start different simulations at the same time in the same room.
- #61161, #61160 - When opening a collaborative room, the “guest” user was prompted to choose a folder to save the Road Editor project locally. Now, disk saving is not mandatory anymore. Furthermore, it is possible to modify project preferences without being prompted for disk access or folder selection. The changes are correctly saved and synchronized without any local path requirement.
- #66346 - Various enhancements on the Actions Editor, the interface to configure actions buttons to use in the Robot Manager Interface.
- #67030 - In the Flow configuration, when defining a slot specific strategy, we now use the render2 display components to display the slots.
- #66589 - Add a map tiles epic to only load tiles when opening a project.

### Bug fixes

- #67235 - "Draw segment/turn" tools could simultaneously edit and draw segments/turns.
- #67044 - Missing permissions on first login for Road Editor.
- #66557 - "Move element along its orientation" translates object along incorrect axes.
- #66356 - When reloading the simulation, the refresh timer (refreshSimulationData) continued calling getSimulationData() while the WebAssembly simulation service was being deinitialized and reinitialized which cause the console to display a lot of “BalyoSimulation timeout” errors.
- #66083 - Road Editor was crashing when moving a full Veeny circuit.
- #65582 - When editing rack parameters values, the first mouse-wheel scroll over a numeric field triggers a viewport zoom (instead of adjusting the value).
- #65575 - Copy-paste of a layer in Collaborative mode corrupted circuit (Duplicate IDs, Wrong Selections, XML Save Errors, and Missing Elements After Render 1).
- #65909 - The simulation report could state that the objective target was not achieved when it was but the robots were idling a lot.
- #67205 - Copy-paste conveyors had a cut-paste behavior.
- #65910 - Shortcuts to select the nearest segment or Lock/Unlock shapes from the keyboard did not work anymore.
- #65731 - The traffic display stayed on screen even after switching to another project.

## ROAD EDITOR 2.37.7

2025-01-26/ BalyoSimulation\_4.19.0\_v1.3

### Bug fixes

- #67593, #67050 - Segments without portions were not properly recognized, which caused circuit problems.
- #67543 - Enabled/disabled a cell in a rack is possible and no longer causes validation issues.

## ROAD EDITOR 2.37.6

2025-01-13/ BalyoSimulation\_4.19.0\_v1.3

### Bug fixes

- Unstuck users stuck on former Road Editor versions (auto-update)

## ROAD EDITOR 2.37.5

2025-01-13/ BalyoSimulation\_4.19.0\_v1.3

### Bug fixes

- #67044 - Some users had to refresh Road Editor to have the right to use it, despite they had the proper permissions

## ROAD EDITOR 2.37.4

2025-01-12/ BalyoSimulation\_4.19.0\_v1.3

### Bug fixes

- #52954 - The traffic check tool is now working correctly. It allows you to analyze taxis and chargers to verify that they are valid.

## ROAD EDITOR 2.37.3


2025-12-23/ BalyoSimulation\_4.19.0\_v1.3

### New feature

- #63023 - Rack Position Checker - verify rack calibration defined in Road Editor by leveraging map reference points from Map Editor.  
Prerequisite; This feature is compatible only with Map Editor v4.1 or higher. Please ensure the Companion is downloaded and installed to use this feature  
Process:
  1. In Road Editor, go to Project Settings → Advanced User → Rack Analysis
  2. Select the new RPC method: Rack Position Checker. Click on “Analyse”
  3. Map Editor will ask you to locate the file AAA-BBBB-010.map\_editorIN in the Circuits folder of your project save in local (first time only).

4. A Map Editor pop-up opens alongside Road Editor, where it calculates rack positions and displays the visual results on the map using the map reference points.

5. You can close the Map Editor windows as the evaluation results are sent back to Road Editor, with each rack assigned a status:

- Perfect (Green)
- Good (Black)
- Bad (Red) – requires correction, often with an automatic repositioning proposal
-  No proposal is generated if racks are too far from reference points or if map logs are of insufficient quality.

6. Select with the checkboxes on racks, the recommendation you want to apply. Execute the modifications by clicking on “Apply selection”.

- #57639 - In the simulation report, merge the results from designated flows as one thanks to a new flow configuration feature “Flow Group”.  
One example of use would be to define different flows from conveyors to storage because the conveyors have different throughputs and then, define a flow group for all these flows to check their global operational throughput.  
“A Flow Group is an organizational feature, and its use is optional.  
It is designed to allow users to cluster related flows. When the simulation report is generated, this grouping enables the creation of a dedicated table containing the aggregated data for these specific flows.”

## Changes

- #61022 - When using collaborative mode, do not propagate the layout images with the YJS Websockets to save server RAM and users bandwidth. It will improve display performance.
- #64454 - Update the device icon in the tool menu and when displayed on the circuit.
- #63871 - When using SDK 4.20 with StockDB, define the stockzone parameter “palletPresence” as 0 by default.
- #52769 - In the Simulation report, display a summary of simulation results at the very beginning of the report with the most important data that could fit in a screenshot (for average size project).
- #56770 - In the Simulation report, on section Task Performance analysis, Avoid the overlapped text when displaying OpcBattery task.

## Bug fixes

- #63026, #63050 - When using the share button to create a multiplayer room, Road Editor crashed with an out of memory error from the chrome page 'this page had an error' (not the Road Editor automatic crash page).
- #65678 - Investigation on “Generation of the XML file failed” error on a project.
- #65335 - Using render2 display, internal segments and point orientations were displayed even though filters for points and stock zones were disabled.
- #64388 - During check flow, ensure the itinerary checks are from the start of the extended length.

- #64385 - Using render2 display, enhance the performance of Road Editor when using the copy/paste function for multiple racks.
- #65847 - Unable to resize segments using endpoint arrows on Render 1.
- #65386 - Same name to two slots from the same cell, belonging to different load patterns was allowed without getting any warning or error.
- #64630 - In the Rack edition menu, modify the position of the 'beamThickness' button that could be hidden.

## ROAD EDITOR 2.36.8

2025-12-05/ BalyoSimulation\_4.19.0\_v1.2

### Bug fixes

- #64376 - [Circuit][S-turn] Strange S-turn created without standard parameters

## ROAD EDITOR 2.36.7

2025-12-04/ BalyoSimulation\_4.19.0\_v1.2

### Bug fixes

- #66182 - StockDB - Update point properties when updating segment portions

## ROAD EDITOR 2.36.6

2025-11-28/ BalyoSimulation\_4.19.0\_v1.2

### Bug fixes

- #66236 - Saving a custom strategy created too many tasks in periodic trigger:
  - At each period of task creation, the simulation was creating all the possible combination of tasks instead of just one as requested
  - The user strategy was not saved when editing a flow (it was reset when saving)

## ROAD EDITOR 2.36.5

2025-11-26/ BalyoSimulation\_4.19.0\_v1.2

### Bug fixes

- #66280 - The collaborative mode was sometimes not working due to authentication not allowing the websocket upgrade.

## ROAD EDITOR 2.36.4

2025-11-25/ BalyoSimulation\_4.19.0\_v1.2

### Bug fixes

- #66265 - Cannot retrieve the Map Editor tiles as layout even though a release with tiles exist

## ROAD EDITOR 2.36.3

2025-11-25/ BalyoSimulation\_4.19.0\_v1.2

### Bug fixes

- #66089 - Export Circuit” Function Not Working — Exported File Is Empty

## ROAD EDITOR 2.36.2

2025-11-25/ BalyoSimulation\_4.19.0\_v1.2

### Bug fixes

- #66053 - When using Predefined Shapes, the “Failed to Parse Clipboard Data / No JSON Data” error was triggered after Paste, a partial shape was displayed and then Road Editor would crash on a simple click.

## ROAD EDITOR 2.36.1

2025-11-25/ BalyoSimulation\_4.19.0\_v1.2

### Bug fixes

- #65983 - During a Layout configuration, the button rescale could not be moved.

## ROAD EDITOR 2.36.0

2025-11-25/ BalyoSimulation\_4.19.0\_v1.2

### Changes

- #65590 - Following the last version implementation, change the traffic type of multiple elements, lines and TURNS, at a time.

- #63841 - Improve the gabarit display performance when moving one shape to only recalculate this one.
- #64450 - Remove the chip "render2" when using render2 display and display a chip "render1" when render1 is used.
- #65632 - Validate cell template using Zod to find if and where is the issue when someone pastes a wrong cell template.
- #63557 - In Flow configuration, if a slot is disabled:
  - It will not be offered as an available slot for the station creation
  - If it is subsequently deactivated, the slot will be indicated as deactivated in the station configuration.
- #62648 - When resuming a simulation, clear the late deadlock messages.
- #60943 - Using render2 display, bring back the lidar map export feature.
- #49760 - Rework the display of the Simulation report by improving the Flow definition in:
  - Showing less station description if longer than 4 lines
  - Displaying the defined objectives

### Bug fixes

- #65669 - Adapt the circuit save to the stockDB expectation starting from SDK 4.20 usage by fixing unexpected segment coordinates in GeoJSON after an XML update.
- #65267 - Using render2 display, hovering over control points on a small zone was hiding the zone and its icons.
- #64856 - When clicking on report a bug, the old google form was displayed instead of just the redmine redirection.
- #65906 - In render2 the "current shape" mentioned had disappeared.
- #65153 - Selecting a point on an extended length made Road Editor crash
- #64865 - The error was appearing "Image appears to be corrupted (failed to decode)" when saving a project with multiple layout images.
- #64406 - "Invalid cell template in clipboard" error was triggered after copying and pasting a rack.
- #64355 - Using render2, the "Align Horizontally/Vertically" submenu flickered and failed to display the options "Left, Center, Right."
- #64270 - During the simulation, when activating the Advanced Traffic Display, the Dead-end and Kernel option would appear.
- #64194 - In the Route tool, the change of Balyo Simulation version caused the error "Error while computing itinerary."
- #63995 - The feature to "Split too long rack" was not working as expected when editing circuit in collaborative mode.
- #63296 - In the Flows configuration, it was not possible to define trigger throughput lower than 1.
- #60203 - For SDK compatibility, avoid using properties name longer than 31 char in .geojson.
- #58412 - Traffic.swal cache file was not used because of an issue in the computation of the checksum.



# ROAD EDITOR 2.35.5

2025-11-07/ BalyoSimulation\_4.19.0\_v1.2

## New feature

- #54266 - Change the traffic type of multiple segments at a time

## Changes

- #62996 - Enhancing the performance of the “Check Flows” functionality for small projects. The improvement for big projects is planned for a next release (#65492)
  -
- #60060, #65100 - Upgrade library packages - first updates router and d3

## Bug fixes

- #64957 - When creating a new project in a collaborative room, the fatal error was appearing stating "Pref error attribute not defined".
- #64140 - Check TypeScript issues in the pipeline
- #65263 - In the rack editor, the rack parameters were indefinitely incremented when using arrow keys.
- #65406 - The extended length of racks and stockzone were not displayed via render1 display anymore
- #65378 - The “Road Editor Guest” role, which should only have read-only access to projects, had some editing and configuration permissions.
- #65093 - The two racks from Gravity rack object were separated because of rotate and undo manipulation
- #65297 - Duplicating a layer was causing duplicated names.

# ROAD EDITOR 2.34.0

2025-09-16/ BalyoSimulation\_4.19.0\_v1.1

## Changes

- #62171 - While editing traffic on a segment, an additional button forces the full segment's traffic type instead of defining this portion by portion.
- #62222 - During simulation, highlight the robot that is blocking another robot in orange.
- #62519 - During simulation, color robots when charging
- #62581 - Re-phrase the Update Interval Throughput calculation explanation for better understanding
- #62707 - Visual indicator of direction on turns are now displayed

- #63465 - Prevent users from naming or renaming a flow with invalid characters

### Bug fixes

- #61835, #61859 - Rework the “align horizontally” and “align vertically” feature for better access in the contextual menu and
- #63805 - Display the loading icon when loading a project

## ROAD EDITOR 2.33.0

2025-09-16/ BalyoSimulation\_4.19.0\_v1.1

### Features

- #63994 - Ability to split too long racks into sections of maximum 30 meters. The definition and naming of the initial racks are kept. The goal of this feature is to better position racks if bent.

### Changes

- #63911 - Save VNA access to rack parameters in the circuit geoJson. This new field is named vnaAccess. The values are (0, 1, 2, 3), their meanings are:
  - 0 = no VNA access
  - 1 = VNA access from side only (default value)
  - 2 = VNA access from front only
  - 3 = VNA access from front and side
- #55017 - A new zone parameter has been added to define “no Rotation” area for VNA forks. Starting from SDK 4.20, these zones will be handled by the SDK and would not need to be named noRotation anymore.
- #63383 - In the Key Elements Report, indicate whether slots from a rack came from disabled cells.
- #63375 - Using Render2 display, display an icon on the turns defined as Stop Before Turn
- #62501 - In the Traffic mode, ability to differentiate parts of the circuits between kernel and deadend where each deadends as a different color to make it more visible.
- #61606 - In the scheduler configuration, add the parameter useDistance in emptyTravelCost definition. The empty travel cost can be calculated either in time or in distance. By default, it is based on time. To change it to distance, you must enable an option in the Scheduler configuration.
- #59970 - Warn the user if the rack object is longer than 30m.

### Bug fixes

- #62570 - The itineraries displayed during the check flow action was twitching
- #62955 - Avoid special character / when creating a new project
- #63192 - During simulation, the option to pick drop in stockzones to random position in line was not working

- #63960 - Update the url to the BalyoDoc dedicated file for scheduler configuration.
- #63881 - During the check flow , the flow itineraries in blue did not appear on the circuit.
- #63215 - Moving around the circuit reseted the view location

## ROAD EDITOR 2.32.10

2025-09-02/ BalyoSimulation\_4.18.0\_v2.6

### Features

- #58752 - When drawing circuits, the “Connect all to a segment” feature can be applied on several storage objects at a time.
- #50416 - To better configure flow used in the simulation, the flow menu allows a slot strategy definition in order to choose where to pick and drop from a station with rules. The condition can be set manually by “drawing lines” in between pick/drop/move steps. The button “Link Same-Aisle Racks” automatically draws links to make sure pick/drop are done in the same aisle.

Limits:

- The circuit view only displays full objects.
- The Link Same-Aisle Racks only works for racks that are in front of each other. It may not include an exchange area that is separated.

Next: This implementation is a first step of the solution, the goal is to implement other automatic solutions in order to define configuration quickly.

### Changes

- #54097 - To improve compatibility with SDK 4.20, uniformize portionId and portionAbscissa fields in circuit export.
- #60849 - Additional parameter in the rack palletPresence that allows to initialize storage entities with/without content when opening a Robot Manager (compatibility with SDK 4.20)
- #63071 - In the report of key element definition, add a parameter to specify whether a slot is enabled or not.
- #58095 - LoadCircuitSimulation is a nice util function we developed, use it over \_TRACK\_WasmWrapper\_loadCircuit. It is more optimized and manages the circuit memory that is being freed.
- #63353 - Edit the birdview parameter in collab mode to display information in the project settings menu.
- #62946 - During a “Check flows” verification, display a warning message if one of the flows is defined without at least two stations.

## Bug fixes

- #63015 - [Layout] Could not save circuit because the background picture was considered too big "The layout image xxx.png could not be saved. It may be corrupted or too large."
- #62790 - Rack name was reset if the user modified both the name and other values in the same operation.
- #62285 - When starting simulation, prevent crash when loading an invalid robot image
- #63527 - In the circuit export, slotAbscissa values were duplicated after performing a circuit upgrade
- #62992 - At the beginning of simulation, robots were displayed in (0, 0) instead of their taxi positions.
- #62360 - Prevent the user from leaving a slot name empty as it may cause the Road Editor to crash.
- #63116 - The measurer was detached from an already attached element when the measurer was repositioned.

# ROAD EDITOR 2.31.3

2025-08-07 / BalyoSimulation\_4.16.4\_v2.3

## Features

- #60694 - Open circuit directly from Dashboard and retrieve the project content and circuit from gitlab.

## Changes

### Simulation

- #63111 - The simulation parameter "Enable Charging" has been moved into the "Robot Simulation Configuration" menu. It avoids the OPC initialization if not used and not configured.
- #62493 - Disable all triggers when clicking on the "enable/disable all triggers" checkbox instead of enabling them all.
- #50356 - In the report, do not display flows with disabled triggers or no task created in the results.

### Circuit edition

- #62889 - Improve the Key Elements Report generation if the circuit is invalid or even empty, it displays an error message to the users.
- #63055 - In the Key Elements Report, export the Pallet Overflow when the load pattern value is unlinked.
- #62636 - Replace manual type guards with Zod schemas to improve code readability, maintainability, and robustness.

- #61654 - Emphasize when a load is using a custom pallet overflow by adding warning icons.

### Bug fixes

- #61800 - When the rack level went from 1 to 2, the beams were not appearing.
- #62869 - Add integration end-to-end test for rack creation.
- #62860 - Saving the circuit gave the wrong hardware name for ComBox Gen 2 in install pref.
- #62619 - Display back the warning when initializing the simulation and taxi are missing.
- #62611 - Restore the ability to change the battery type of charger points.
- #62373 - Map Editor Project Name was not reset/properly loaded when loading a new project.
- #62346 - Road Editor crashed after performing a "Share" project.
- #62147 - Could not generate the PDF of a simulation report when the report is too large. When generating a standard multi-page PDF, the process fails on large reports. The rendering library attempted to load the entire DOM into memory at once, leading to a memory leak that crashed the render, resulting in a corrupted PDF.
- #62146 - Crash when moving a step up in flow definition.
- #62114 - Avoid the creation of CellTemplates with duplicate names.
- #61661 - A change of pallet overflow in the drawing was saved in the global value instead of the pattern value.
- #60530 - In the flow definition, if no objective was defined, the summary displayed a 0 without context

## ROAD EDITOR 2.30.1

2025-07-25 / BalyoSimulation\_4.18.0\_v2.2

### Bug fixes

- #63061 - In render2, the cursor is no longer stuck after clicking on a shape.

## ROAD EDITOR 2.30.0

2025-07-23 / BalyoSimulation\_4.18.0\_v2.2

### Bug fixes

- #61767 - No more errors when modifying a middle aisle segment.

- #61227 - In collaborative mode, deleting a layer no longer causes other users to crash.
- #60324 - In the simulation report, the task duration statistics chart no longer crashes.
- #61508 - When creating a new flow, it is again possible to change the affiliation of robots.
- #59720 - In render2, gabarits are displayed gradually as soon as one of the gabarits is computed, rather than waiting for all of them to be computed.

### Changes

- #62824 - In the extended length menu, the robots selected to calculate the extended length are now saved.
- #57998 - In the extended length menu, it is now possible to select or deselect all robots in one action.
- #61424 - In the RMI action editor menu, long names can now be displayed correctly.
- #60853 - In render2, the layout image can be moved when selected.
- #59856 - To check the flow, fast mode is now the default mode.
- #59231 - In render2, the navigation map opacity slider is now usable.
- #57379 - The suggested extended length for the VNA is set to 0 due to the side picks.

### New Features

- #56338 - A key elements report is now available in the project settings menu. This report aims to simplify the review of circuits with key information on zones, rack slots and init points.
- #55702 - The check flow function now takes into account the itineraries between taxi points and slots.

## ROAD EDITOR 2.29.2

2025-07-17 / BalyoSimulation\_4.18.0\_v2.2

### Bug fixes

- #62832 / #62313 - Disable the StockDB geojson conversion for 4.17.x.

## ROAD EDITOR 2.29.1

2025-07-09 / BalyoSimulation\_4.18.0\_v2.2

### New features

- #54440 - In the traffic menu, **highlight the kernel and deadends** by displaying the portion in two distinct colors. The next step of this feature will be to differentiate individual deadends with unique color (#62501)

## Changes

### Circuit format

- #62313 - **Enable the StockDB geojson conversion** for projects using **SDK version 4.16.6** in addition to projects using SDK above version 4.20.0

### Simulation

- #60137 - **Prevent the simulation** from starting if a **fatal error** is received while loading the simulation. The simulation was stopped correctly when receiving a fatal error during the simulation but could run if the error was caught prior the start even though it meant that the simulation could not be able to run nominally. Now, this situation is prevented and an error is clearly displayed.
- #59975 - The **simulation display speed** can be chosen before running it.
- #61504 - When creating a new project for simulation purposes, **all the robots are simulated** by default.
- #60214 - Save the Flow Configuration Summary as one unique page to avoid being truncated when saved as a PDF.
- #61116 - To increase **performance** during simulation, the robots images size has been reduced. The robot display size remains the same.

### Circuit

- #53836 - In the rack definition, rework the edition of the parameter "depth" to avoid blocking the writing, instead let the user write the number completely and then if the value is too low or high make a warning next to the input.
- #53110 - The "**Copy turn parameters**" feature copies also the **traffic type** of the turn from which the parameters are copied.
- #42857 - During circuit edition, the name of the object that the mouse is hovering is displayed next to the shape (top left) but also on the bottom right of the screen next to the mouse coordinate.

### Render2 display

- #60161 - Apply back the shortcuts **F/B on hovered shapes** in order to "Bring to front" or "Send to back" the desired shapes.
- #59845 - During the simulation, display in the robot card which robot is blocking it when the traffic status is "AutoWait" mode
- #59091 - Improve the selection of a S-turn by allowing it on the whole turn and not only on the ends.
- #59355 - Improve the display of objects while zooming to avoid "blurred lines".
- #57797 - During zone selection, add handles on the middle of lines and not only on the corners to ease the resizing.
- #57363 - Avoid displaying circuit coordinates over the toolbox (selection menu).
- #56350 - Restore the display of a stopBeforeTurn icon on turns defined with parameter stopBeforeTurn.
- #56042 - During the simulation, display the robot status icons such as traffic icon, perception icon, forks movement icon in front of the robots

- #42194 - When zooming on the circuit, the **grid axes** are now **precise to the millimeter**.

### Bug fixes

- #62235 - The generation of the XML file failed after executing the "save project." as the conveyors contain one extra upright. On new conveyors, this situation is now prevented. If a circuit is already corrupted by this issue, there is no automatic correction. Two solutions: find the culprit conveyor, delete it and draw it again in Road Editor OR remove the duplicated upright definition in the geoJson format circuit, reopen the project with Road Editor and try saving the XML file again.
- #62208 - Improve the tooltip message that states that stockDB is available starting from SDK 4.20 (inclusive).
- #62089 - Improve the measurer display when the attached shape moves.
- #61602 - Prevent assigning the same name to two different destination points.
- #61317 - Prevent crash when renaming load pattern during rack edition.
- #61282 - The check flow button has been removed from the flow creation menu because if the flow has not been created it cannot be tested. Once created, the check flow feature is available.
- #60220 - In the trigger menu definition, the parameters from linked triggers (automatically created) are all locked.
- #60139 - Fix regressions in the Route tool. While being in the Route tool the departure point, arrival point and itinerary must be shown. The keep display was only activated while leaving the tool. When the Route option was open, the scroll bar was not appearing anymore, the itinerary descriptions could not be seen (outside of the screen).
- #59624 - Do not allow a person with Circuit Edition only Licence to modify the simulation configuration.
- #59623 - Allow to use space in stockzone name
- #59012, #55799 - Deadlock solver struggled to make the collision graph which was spamming the console with logs and made the simulation seem frozen.

### Monitoring

- #59735 - The robots seemed to ignore traffic as they were crossing each other in simulation. Several fixes have been made to prevent the situation and clarify the error to the user.

## ROAD EDITOR 2.28.3

2025-06-23 / BalyoSimulation\_4.18.0\_v2.2

### Bug fixes

- #62348 - Enable immediate upgrade loading on project open.



# ROAD EDITOR 2.28.2

2025-06-23 / BalyoSimulation\_4.18.0\_v2.2

## Bug fixes

- #62243 - Improve feedback for "StockDB updating" Snack Bar.

# ROAD EDITOR 2.28.1

2025-06-17 / BalyoSimulation\_4.18.0\_v2.2

## Compatibility Update

This version introduces **a new circuit data format** (XML & GeoJSON) for full **compatibility with SDK 4.20**. This update leverages the new **StockDB**, a high-performance database for system configuration, replacing the legacy, project-code-driven, and less scalable stkDB. Support for **earlier SDK versions is maintained**.

Key benefits for users:

- Projects load faster on the robot and in the Robot Manager, reducing wait times and improving overall productivity
- Road Editor now automatically exports the necessary data to support StockDB.
- Circuits remain compatible with previous SDKs — no changes required on your side.

**Note:** This update is backward-compatible. Road Editor will handle the correct export format based on the targeted SDK version.

 **Important:** When opening a project for the first time with this version of Road Editor, the internal data structure will be automatically upgraded. Please wait for the update process to fully complete before working, saving, or exporting the circuit. This ensures data integrity and compatibility with all supported SDKs.

A loading message will indicate that the upgrade is in progress. Depending on the size of your project, this may take up to 5 minutes (duration may vary).

**Note:** This upgrade only needs to be done once per project.

## Changes

- #52265 - XML & GeoJSON: Improved representation of extended rack and stockline lengths.
- #52264 - GeoJSON: Added portionID and curvilinear abscissas to StockLines.
- #52800 - Introduced new stockDBConfiguration export schema
- #52198 - Prefer using key/values than mixed types lists.
- #52198 - Prefer exporting data even if they are default values.
- #52266 - Rack slot positions now include extended length IDs
- #52797 - Export the curvilinear abscissa of each point within its corresponding portion.
- #58916 - Point positions on segments are now validated during the update process
- #61465 - Updated default cell template IDs for StockDB compatibility.
- #61982 - A UI indicator now shows whether StockDB export is enabled.

## ROAD EDITOR 2.27.1

2025-06-16 / BalyoSimulation\_4.18.0\_v2.2

### New features

- #62044 - Ability to opt-out the automatic export of the dispatcherConfiguration.json by Road Editor

### Bug fixes

- #61809 - Error Enable new dispatcher even though it is activated already

## ROAD EDITOR 2.27.0

2025-06-05 / BalyoSimulation\_4.18.0\_v2.2

### Changes

- #60851 - In the Configure Charging Strategy from the Robots Simulation Configuration menu, a reset button has been added to restore the default Opportunity Charging configuration.

- #60115 - In the project configuration, improve the RMI Action Editor
  - Disable the key “e” as a number in the argument section
  - Fix a bug that occurred when a user moved a folder into itself, preventing the creation of new actions or folders.
  - Add descriptions for several functions.
  - Add tooltip for required switch button
  - Hide the image name input when there is no image data
  - Add a new button to load the actions manually and renamed the load actions into reset actions.
- #59759 - In the simulation menu, show a warning if the communication mode is not wifi because the fleet traffic would be disabled.
- #59276 - During the simulation, on the robot summary view, display the battery level as unavailable when robots are not simulated (and therefore in manual)
- #58514 - In the simulation trigger menu, the "Update multiple interval throughputs" function has been improved to output throughputs with decimals.
- #58345 - Add warnings when changing the battery type of a/several robot(s) to help the user understand he has to change the battery type of the points as well.
- #61021 - Refactor the geojson circuit format to remove unnecessary “updated”/“loading”/“loaded” tags from all shapes

### Bug fixes

- #60035 - Segments were losing their types when switching layer from Draft to Real
- #61641 - Road Editor crashed after creating a conveyor and then clicking on it to open its properties.
- #61283 - Ctrl+Z canceled several actions at once, not just one
- #61155 - Stocklines names were not well saved in the xml format circuit
- #61070 - Interval triggers with null values lead Road Editor to crash
- #60959 - The randomization of the pick/drop location in stocklines were applied only on pick and not drop
- #60775 - When extended a segment, the points also moved
- #60108 - Duplicated names were generated for the middle segments of aisle segments
- #60107 - Rack could be created without slot names
- #59908 - OPC config file was not saving
- #59823 - In rack edition, unlinked cell heights were still modified by the “Update all” rack panel
- #59762 - In the Route tool to display itineraries, the two buttons "Select departure point" and "Select arrival point" were not displayed on the same line when the coordinates of the points were big.
- #59714 - Wrong snapping of the points
- #59600 - Prevent the error log "window is not defined" that triggers a lot of Sentry error
- #57469 - The imported 'Layout Image' in Project Settings was not shared with the collaborative mode

## ROAD EDITOR 2.26.6

2025-05-21 / BalyoSimulation\_4.18.0\_v2.2

### Bug fixes

#61247 - Restore the ability to open the layer settings in “Blank Mode” (no project)

## ROAD EDITOR 2.26.5

2025-05-21 / BalyoSimulation\_4.18.0\_v2.2

### Bug fixes

#61458 - Export the number of pallet in depth for gravity racks in the XML circuit

## ROAD EDITOR 2.26.4

2025-05-20 / BalyoSimulation\_4.18.0\_v2.2

### Bug fixes

#61444 - Fix the issue where the layer group has an empty name when initializing layers.

## ROAD EDITOR 2.26.3

2025-05-16 / BalyoSimulation\_4.18.0\_v2.2

### New features

- #56635 - Adapt the display of the birdview to match the new format retrieved from Map Editor. Instead of one layout, **three layouts** are now imported: **birdview, map image and safety image**. In the filters, those three layouts can be handled separately under the category **Map Editor Images**. Additionally, the parameter named “Obstacle Lidar Map” has been modified into “**Additional Lidar Map**”.
- #56517 - **Save** the configuration of the dispatcher used for a simulation as **dispatcherConfiguration.json** in the project folder, so that the exact configuration can be applied on the installation later. If in the fields "taskDefinition" and "Options", any elements have been manually modified or added by the user, Road Editor does not overwrite their data. However, the "Flows" data is always overwritten.
- #47605; #57186 - Duplicate a circuit and rename circuits when working on a project directly in Road Editor.

## Changes

- #58648 - During the simulation, when a robot is in traffic or deadlock, the snackbars and statuses mention the name of the impacted robots instead of the robot ID to ease the understanding.
- #60724 - At the opening of Road Editor, if the user does not have access to the tool, redirect to Balyo Dashboard and not to Balyo Partner Portal anymore as it has been depreciated.
- #59638 - During flows configuration, the creation and modification of instances take effect only after the user clicks on the "Create"/"Save" buttons.
- #58726 - Detect when the hardware acceleration is not enabled and warn the user as it has a significant impact on the performance of the tool.
- #55452 - Optimize the project saving by improving the device saving time.
- #55262 - Within the render2 display, show the properties of extended length rack segments when selecting one.
- #53330 - Ability for Road Editor to get preferences from the BalyoSimulation module, and thereby access SDK dictionaries.
- #60698 - The documentation link in the Predefined shapes drawing tool now refers to BalyoDocs

## Bug fixes

- #59686 - Fetch the right version of the model file for the Lowy CB-A 15 Gen1
- #60441 - When creating a new blank and press the button open project settings, the application was crashing
- #59893 - In the simulation report, the circuit name in the report was the name of the main circuit of the project and not necessarily the simulated circuit.
- #59728 - Switching between Render1 and Render2 display while using collaborative mode resulted in the deletion of the drawn circuit and was creating duplicated layers.
- #59635 - The racks were getting separated from their "Extended length" after copying them into a hidden layer.
- #60002 - Wrong indentation after a user comment in install.xml
- #59748 - After a renaming rack slots with a naming rule that triggers warning, Road crashed
- #59657 - Wrong display of small extended length
- #59427 - It was not possible to display "Configure Charging Strategy" before reopening the new project.
- #57620 - Not all fields were locked when a device was locked

# ROAD EDITOR 2.25.1

2025-04-08 / BalyoSimulation\_4.16.4\_v2.3

## New features

- #56614 - In order to ease a simulation preparation, the **stations, flows, or triggers can be duplicated** by a simple click. The duplicator will be named after the original element with "Copy" as a suffix.
- #49940 - Ease the **station configuration** by **applying several rules to filter** the list of positions. To do so, separate the strings with a space. The research is not case sensitive.  
*Example : If the filter defined is "bonjour hello", the position displayed will be the shapes where both of the strings exist.*  
*"hello-bonjour-32" = match*  
*"bonjourHELLO43" = match*  
*"hello" = do not match*  
*"Helbonjour" = do not match*  
 Additional enhancement, when a position is clicked it is directly added in the station. No need to select the position and click on the add icon anymore.
- #55330 - In a flow, the **number of pallets per task is now automatically updated** to a reference value depending on the **number of steps in the flow**. To ease the understanding, this parameter is now positioned below the station selection. The parameter is still manually editable. A change in the number of steps will change the number of pallets per task parameter, however the opposite is not true.
- #56202 - A new UI is now available to help users create **action configuration files for the RMI** (Robot Manager Interface), this feature is still in beta and will be improved in the next versions.

## Changes

- #50945 - **Better line change turns** (also known as "S-curve") configuration. The turns in between parallel segments have two "Radius" and two "Max overshoot" parameters for the start and end of the turn (according to the track direction).
- #58818 - Better display of highlighted turns in Render2 with color enhancement.
- #58710 - **Prevent modification of circuits in collaborative mode from offline users**. A message stating "Connection lost" is displayed.
- #56185 - The simulation report is now exported as a single long PDF page
- #54167 - The minimum recommended spacing values for stock zones have been updated to follow the TTC values.

## Bug fixes

- #59766 - Remove blanks line during the export of the install.xml file
- #59101 - Discard changes made in the flow or station tab when not saved
- #58727 - Prevent the creation of segments using the middle click in Render2
- #56293 - Display slot names in the Rack Editor for tiny cells
- #55893 - In the simulation, some errors were ignored
- #51665 - A browser crash with the Opera browser when opening a project
- #57748 - Prevent the drawing of super large stock zones

## ROAD EDITOR 2.24.5

2025-04-04/ BalyoSimulation\_4.16.4\_v2.1

### Bug fixes

- #60323 - fix a crash when displaying the simulation report on a special project

## ROAD EDITOR 2.24.4

2025-03-27 / BalyoSimulation\_4.16.4\_v2.1

### Bug fixes

- #59824 - fix crash due to a out of memory

## ROAD EDITOR 2.24.3

2025-03-19 / BalyoSimulation\_4.16.4\_v2.1

### Bug fixes

- #59859 - If the opc config does not contain the "workloadStrategy" data, the opc config is reset to default when the project is loaded.
- #59666 - In the simulation, clicking on pause does not always pause the simulation.

## ROAD EDITOR 2.24.2

2025-03-18 / BalyoSimulation\_4.16.4\_v2.1

### New features

- #53166 - **Propagate the simulation configuration** when using the collaborative mode of Road Editor. When opening a project/circuit in collaborative mode, the simulation configuration was not shared to the other users, only the circuit edition was propagated. Now, the configuration of the simulation is shared: meaning the **stations** definitions, the **flows** definitions, the **triggers** definitions and the **robots configurations** but **NOT a live simulation** yet.
- #58675 - When importing a **CSV file to create a replay trigger** for a simulation, a new parameter "**Priority**" allows to export, import and define each task with a corresponding priority. The default value is 1.
- #50390 - Introduction of a new circuit design tool to create **Gravity Racks**. It will create **two mirrored racks** with some common geometrical definitions and naming.

Having a dedicated will ease the slots alignment, create a visual distinction from standard racks and will help the design to avoid mistakes.

- #59014 - The “**Report a bug**” feature on Road Editor will redirect the user to a **Redmine** page in order to create a **New issue**. The description of the issue will be pre-configured with project information. You will still have to describe the issue with more details (what you observed vs what you expected).

## Changes

- #59554 - In the simulation report, the **exact version** name of the package BalyoSimulation is displayed.
- #58722 - **Improve pick/drop choice position behavior** from previous station. When picking/dropping in a station, we **sometimes want to pick/drop at the exact same location** that we picked/dropped at the previous step. (Example of use case: drop at a conveyor that performs a transformation on the pallet, wait for a bit, and then pick the exact same pallet) But **sometimes we do not want** this behavior. (Example of use case: rack to rack movements).

The **previous** behavior: If the **list of possible slots** of the next step are exactly the same as the previous step then pick/drop at the same location.

The **new** behavior: If the **station** of the next step is the same as the previous step then pick/drop at the same location. Thereby a user would be able to define two identical stations to specify one does not want to pick/drop in the same exact slot.

- #55653 - During “Circuit Modification”, the segment portion type “Deadend entry” and “Deadend exit” are now displayed with different colors.
- #58618 - In the Traffic Debug tool, update the tooltip description of the Kernel No Stop

## Bug fixes

- #59031 - The number of tasks created with a replay trigger from an existing simulation was inconsistent.
- #58908 - With render2 display, the measurers were displayed above the robots during the simulation
- #58891 - The alteration of the name of a charge point within the circuit was not propagated in the Configure Charging Strategy which led to OPC errors during the simulation.
- #58884 - The gabarits for the S turns were not displayed.
- #58817 - If the “Report a Bug” request was cancelled, the feature did not work anymore.
- #58711 - If the user was offline and refreshed the page, Road Editor crashed.
- #58541 - The "Undo" function following a deletion did not operate correctly
- #58242 - On the "compute itinerary" route, the different traffic types were not showing up in their corresponding colors.
- #58207 - Indentation removed from device </category> tag in the install.xml file
- #58179 - Wire Guided paths were not displayed as dotted lines anymore.
- #57986 - The points were not oriented when using render2 display.



- #57026 - When creating a new project, the "Chargers Configuration" was empty.

## ROAD EDITOR 2.23.1

2025-03-10 / BalyoSimulation\_4.16.4\_v2.1

### Bug fixes

- #59591 - In render 1, the user can unlock and move an extended length.

## ROAD EDITOR 2.23.0

2025-02-27 / BalyoSimulation\_4.16.4\_v2.1

### BalyoSimulation version changes

- BalyoSimulation version 4.17.0\_v1.0 has been removed. It was used as a preview and is depreciated. The content of SDK 4.17 changed a lot, the preview will reflect better in the next version 4.18.
- A new version 4.16.4\_v2.1 is available with all the fixes that were in the preview version.

### Changes

- #55400 - Better movement of racks and their turns.
- #55858 - In the simulation menu, the user is now informed whether a replay trigger is empty and whether or not he wants to create it anyway.
- #55971 - A warning is now displayed when a layer group is empty.
- #58397 - A replay trigger can now be created even if the source and destination are [id] and not slot name.

### Bug fixes

- #51407 - The battery task can impact the workload calculated for the OPC and delete the task even though there is no mission waiting.
- #57478 - The orientation of the simulated VNA is reversed in relation to its circuit.
- #57648 - The error snack bar "Robot x in error" is always displayed, even when the user exits the simulation menu.
- #57804 - In render2, the length of the small measurers is incorrect.
- #58507 - In render2, the measurer does not attach correctly.
- #57955 - Memory error concerning the "display traffic" tool.
- #58112 - In render 1, the initial opacity of lidar and birdview does not match the level of the sliders.
- #58743 - In the "route" tool menu, the checked path flag values are retained.
- #59227 - Prevent spamming on the movement arrow button.

# ROAD EDITOR 2.22.2

2025-02-14 / BalyoSimulation\_4.17.0\_v1.2

## New features

- #56521, #56520 - During the simulation, in the **robot review** module, icons are displayed to represent the robot's current action (such as perception, forks movement, waiting in traffic, etc.). The battery level is also displayed.
- #49758 - During the **flow definition** to configure a simulation, the option "Enable automatic trigger creation" is introduced when creating a new flow. When activated, it will create a trigger interval as soon as the flow is saved, that is preset with parameters that comply with the flow objective.
- #53296 - Improvement of the collaborative mode to ensure all the changes are **well propagated** by computing sha1 and displaying a propagation badge.
- #55536 - "**Singularity**" turns can be drawn in between "**coinciding**" segments. It will create a turn that contains an only point between two segments that overlap.

## Changes

- #57633 - For better access to the other features, the snackbars messages have been moved from the bottom right corner of the screen to the bottom center.
- #57483 - During the definition of Charging strategy for the simulation and installation of a project, we ensure that a removed charging point in the circuit should not appear within "Configure Charging Strategy " to avoid configuration mistakes.
- #55063 - The report of the simulation includes the information about the Project Git Branch used.
- #54481 - A warning has been added to the Traffic Route tool to let users know that a change of pathFlag in this tool is only temporary and will not change the preferences definition.
- #49662, #56241 - When editing circuit with render2 display, the shortcut F/B to bring to front/back has been added.
- #57028 - When editing circuit with render2 display and the highlight turn display is activated, the turns are emphasized by adding a border around them.
- #56633 - Restore the feature to export an image of the map with render2 display
- #54168 - The use of "space" in the name of a circuit shape has been improved.

## Bug fixes

- #57633, 57820 - Improvement of the Notes selection and display when displayed as a text or image with render2 display
- #58890 - The button "apply to selection" for cell renaming in the rack editor was not working. Sometimes, it did nothing at all and sometimes it was renaming the wrong cell outside of the selection.
- #58402 - Errors could appear during the simulation when using a trigger created from the import of a csv to create a replay trigger.

- #58321 - Investigation on the Rack Position Analysis feature that was not providing any recommendations after an error occurred.
- #58049 - In render2 display, the color of objects remained unaffected by alterations in the "Type of traffic."
- #57929 - Turn selection was difficult.
- #57724 - Using the collaborative mode, when multiple layers were transferred to another layer, deleting it, was causing the Road Editor to crash.
- #57697 - If a project was using more than the maximum number of robot paths (7 pictures) in the simulation, it was making the road editor blocked.
- #57486 - Modifying the "traffic type" of segments was not possible when using the collaborative mode.
- #57471 - Do not allow the user to select unauthorized image formats for "Layout Image" or images in Notes.
- #57197 - Docking stations were not matching the standard dimensions, the template in the Circuit Library tools has been changed accordingly.
- #57088 - Changing the BalyoSimulation package version put back the main circuit and did not keep the current circuit open (if different).
- #56938 - The initialization of the layerGroups name was considering only the robot model name instead of also checking if a preference "modelCircuitName" was existing.
- #56061 - Selecting multiple objects did not work when the "Snap at 90° degrees" feature was activated.
- #56026 - Ensure the simulation restarts after a freeze.
- #55828 - For a newly created project in collaborative mode, the point could not be "snapped" onto a segment using the mouse.
- #53038 - Elements just created could not be deleted.

## ROAD EDITOR 2.21.4

2025-01-28 / BalyoSimulation\_4.17.0\_v1.2

### Bug fixes

- #58123 - Wrong default BalyoSimulation version loaded

## ROAD EDITOR 2.21.3

2025-01-28 / BalyoSimulation\_4.17.0\_v1.2

### Bug fixes

- #58123 - Wrong default BalyoSimulation version loaded

# ROAD EDITOR 2.21.2

2025-01-28 / BalyoSimulation\_4.17.0\_v1.2

## Bug fixes

- #58299 - In render2, the layout image do not always appear
- #57288 - In render2, the color of the racks do not correspond to the color of their layers

# ROAD EDITOR 2.21.1

2025-01-24 / BalyoSimulation\_4.17.0\_v1.2

## Bug fixes

- #58123 - Wrong default BalyoSimulation version loaded

# ROAD EDITOR 2.21.0

2025-01-24 / BalyoSimulation\_4.17.0\_v1.2

## New features

- #52981 - When defining flows for the simulation, a new "Check flow" button allows to verify that all positions in the flow can be reached and itineraries exist.

## Changes

- #57013 - Within the use of the Rack Position Analysis feature, the measures can be disabled with a filter when outside of the defined height range.
- #56419 - Upgrade the implementation about the flow and station configuration to be more understandable for future development.
- #56155 - Improvement of the logic for Rotating Multiple Objects to avoid redundant calculations on shapes.
- #56036 - In the simulation report, display a warning when robots have been idle to enhance the need to create more tasks to meet the flows objectives.
- #55701 - Display the robots data tooltips behind the simulation menu to avoid it being hidden.
- #55037 - Improve the performance of the display while shifting racks using keyboard arrows.
- #51214 - While creating task triggers with interval parameters, the task creation can be limited by an activation range : a start time and a stop time.
- #53054 - The value of the preference "useElevator" can be defined on Road Editor.
- #52552 - After a turn computation failed, if at least one turn is deleted, display a warning stating which one.

### Bug fixes

- #54359 - In the traffic type selection, the text color did not consider the background color
- #58038 - In the circuit in geoJson format the beam thickness value on the ground floor is equal to 0. When a beam or some rail is defined, the value is stored in the "start height" parameter.
- #57754 - Emoji are removed from the text annotation displayed on the circuit if any to avoid crashes.
- #57659 - In the simulation report, the number of reset did not correspond to the behavior seen in simulation.
- #57359 - false positive error messages were displayed when saving while not having set all the cell templates in racks.
- #57288 - The colors of the racks did not correspond to the colors of their layers.
- #56262 - During the simulation, robots could be in AutoWaitDoor status without any presence of doors.

## ROAD EDITOR 2.20.2

2025-01-03 / BalyoSimulation\_4.17.0\_v1.2

### Bug fixes

- #57732 - Infinite loading when opening a project created by road editor

## ROAD EDITOR 2.20.1

2025-01-03 / BalyoSimulation\_4.17.0\_v1.2

### Bug fixes

- #57787 - Prevent crash when a map tiles cannot be loaded

## ROAD EDITOR 2.20.0

2025-01-03 / BalyoSimulation\_4.17.0\_v1.2

### Changes

- #55658 - Using render2 display, restore the feature to connect all slots to a segment on right click.

## Bug fixes

- #54584 - Using render2 display, if the “keep display” option in the Route tool (Traffic menu) is enabled, the itinerary between the departure and arrival point is always displayed even when running a simulation. If disabled, the itinerary is removed from the screen as soon as the user goes out of the Route tool.  
Note: the behavior has been improved using render2 but not render1 as the render2 is becoming the new default display.
- #57449 - Using render2 display, the "Snap at 90°" option was not applied effectively when drawing circuit with the "Draw Shape" tool.
- #57548 - Using render2 display, when editing a measurer, the option to lock its length was not working.
- #57414 - During the simulation, the "Pin the robot data" feature in the new "Robots Summary view" did not function using render2 display.
- #55887 - The exit simulation confirmation popup only appears when the user wants to leave the simulation.
- #56255 - Wrong matching of robot index and robot id is corrected.

# ROAD EDITOR 2.19.0

2024-12-16 / BalyoSimulation\_4.17.0\_v1.1

## New features

- #52647 - During the simulation, a “Robots summary view” is displayed. It allows you to look at the robots statuses and to select the robot to enhance on the display. This overview list will be filled with more data in other versions.

## Changes

- #57074 - When changing the version of BalyoSimulation, saving the project and reopening the project later, the version of BalyoSimulation defined is the latest used version.
- #56045 - The robots assignments to flows can be done in the Flow configuration tool. The dedicated tool shortcut does not appear in the tool panel.
- #55986 - The flow summary view displays more data about the created triggers (interval, throughput, or size).
- #53765 - Retrieve more data to the console if the error is linked to a robot.
- #48468 - In the circuit edition, "Compute number of loads" now takes into account manually deactivated loads from the rack definition.

## Bug fixes

- #52296 - When trying several times the simulation reload, some initialisation errors appeared
- #55768 - Modbus devices did not import properly from the preferences, the values for ioCount, ioAddresses and keepWritingOutputs were overwritten to the default values.
- #56099 - When importing a circuit, duplicate ids could be created in the layers and layer groups
- #56231 - At the project opening, "Device mismatch" error was displayed when some devices were drawn on draft layers of the circuit
- #56764 - After several switches from Circuit Edition mode to Traffic mode, when trying to open the Traffic Display tools, an error "computation fails" was triggered.
- #56863 - A newline in the file install.xml between xml version and sdk version was removed when saving.
- #57098 - Duplicates of snackbar messages for the "Update" of the latest version of Road Editor were displayed.

## ROAD EDITOR 2.18.4

2024-12-09 / BalyoSimulation\_4.17.0\_v1.1

## Bug fixes

- #57194 - Add disclaimer about the VNAs throughput in the simulation

## ROAD EDITOR 2.18.3

2024-12-03 / BalyoSimulation\_4.17.0\_v1.1

## New features

- #54509 - Within the Rack Position Analysis feature, when one looks at the list of measurements, one can select some values and decide to ignore them from the calculation of the ideal position recommendation.
- #55327 - Using render2, on right click on robots during the simulation, display contextual menu.
- #55328 - Using render2, during the simulation, the robots can be dragged to other positions.

## Changes

- #56748 - During the simulation, in the tasks module, hide the canceled tasks (such as the cancelled opportunity charging task) one hour after their creation date.
- #55077 - In the segment parameters, change the name of the button "wireguided" to also include rail guidance .

- #55245 - In the robot information menu, when one changes the IP address of robots, a validity check is conducted and displays an error message if the changed IP address is not correct.
- #54959 - Within the digital twin context, a new parameter allows the user to set a Map Editor project name in order to retrieve the desired birdview layout image. No need to have the very same name of the project in between the tools.
- #55549 - Using render2, in the display traffic menu, use the robot coordinate
- #55640 - Using render2, display the rack middle uprights.

### Bug fixes

- #52893 - In the stockzone menu, improve the edition of the "Slide distance" to move the shape.
- #53349 - During the creation of a new collaborative project, one could not change the parameters "Battery type" and " IP Address" in the robot information menu.
- #54273 - In the cell template definition for the rack, the tooltip describing the pallet overflow has been fixed with a better definition and more tolerant warnings.
- #54408 - When opening different projects one after the other, in specific conditions, the layout image choice was not properly cleaned and was displayed in the newly opened project and even saved in the project folder.
- #56412 - When a layer on the circuit was deleted, the Road Editor application crashed.
- #56603 - Avoid crashes of Road Editor during project opening if the wrong picture path preferences are filled in by a user.
- #56644 - During the creation of a new collaborative project, the circuit was automatically renamed to "undefined".
- #56996 - Road Editor was crashing as soon as a collaborator clicked on the layer menu using the circuit modification with collaborative feature.
- #57000 - In the layer menu, after clicking on the "Initialize Legacy layer Groups" button while using the collaborative mode, the error "Layer not found" was triggered.
- #57083 - Using render2, the "Route" tool to find the itinerary of a robot in between two points did not work.

## ROAD EDITOR 2.17.16

2024-11-21 / BalyoSimulation\_4.17.0\_v1.1

### New features

- #54620 - In the circuit, the annotation can display images to answer the need to display products of other manufacturers.



## Changes

- #54622 - Initialize automatically the Layer Groups when creating a new project or using a new circuit. To make a simulation or a project work, it was mandatory for every user in a new project to click on the "initialize legacy layers" button.
- #55548 - When creating a new project or using a new circuit, automatically initialize two default sub Layers called "Storage" and "Robots" and assign them respectively on the "Common" Layer Group and each of the robot model layer group.
- #55616 - When using Combox Gen2 as devices, the saved preferences are now sorted so that the devices are listed right below their gateways.
- #54556 - Relatively to the request that ComboxGen2 "standard configurations" be removed from the INSTALL dictionary, the selection of this configuration is not possible anymore in Road Editor too.
- #54339, #55091 - Improve the positioning of tooltips in the trigger definition menu and add new helpers to ease the understanding of the configuration.
- #55129 - Improve the simulation report with better "Battery time" data, especially when a robot is already charging when the "Start collecting time" is happening.
- #55665 - When creating a new project, the robot model "Lowy 16 Gen 2 ML B" can now be selected.
- #55874 - Display the robot battery capacity in the report. Note : the ability to select a battery capacity to be used by the emulator/simulation is in progress.

## Bug fixes

- #56224 - Allow to create a new station by right-clicking on a storage shape even if there are no existing stations yet.
- #54812 - During the simulation, Veeny's scheduler/itinerary was avoiding the execution of forks rotation and made the robot rotate itself outside the aisle to catch the pallet instead.
- #55303 - During the simulation, in specific cases, the robot was in error as it was trying to project on the wrong portion while the trackless computation was also not good.
- #52898 - In the stockzone definition, update the tooltip with the right link to associated training.
- #55035 - In the flow definition, using special characters as "/" was breaking the simulation. Now, there is a name check displaying a warning when a flow name or a station name contains "/" on the simulation menu.
- #55645 - Load IDs were not correctly set which led to errors of "duplicates ids".

# ROAD EDITOR 2.16.2

2024-11-14 / BalyoSimulation\_4.17.0\_v1.1

### Bug fixes

- #56578 - [SIMU] Wrong next step with cascade trigger when the next step is not included in the next flow

## ROAD EDITOR 2.16.1

2024-11-06 / BalyoSimulation\_4.17.0\_v1.1

### New features

- #47764 - In the circuit, we can now rotate multiple objects at the same time thanks to the right click option "rotate selected shapes".
- #52942 - In the circuit, we can load a predefined set of shapes from a library and paste them in our circuit.

### Changes

- #53415, #53416 - Rework the stations menu with a list of all created stations. A station can be "opened" to see what is inside and when a station is selected, the corresponding shapes are highlighted in the circuit.
- #53418 - Rework the flow definition form to simplify it and make it coherent with the station definition menu.
- #53420 - Rework the simulation menu. The format of some inputs have changed to simplify the menu and the navigation in the menu.
- #55962 - In the circuit, when you paste a selection with the right click, it's now pasted at the mouse level. When you paste a selection with the shortcut (ctrl + v), the selection is pasted on top of the selected shapes.
- #55563 - In render2, reduction of the CPU usage when displaying racks.

### Bug fixes

- #54984 - In the simulation menu, a warning is now displayed when there are empty stations. In this warning, you can click on the edit icon to directly edit an empty station.
- #50023 - In the circuit, you can now rename as many racks as you want, this will not make Road Editor crash anymore.
- #55748 - In render2, layers with perfect black color can now be displayed.
- #55796 - In the simulation menu, the custom configurations are now maintained. You can leave the simulation menu and then come back and you will have the same custom configuration.

## ROAD EDITOR 2.15.1

2024-10-24 / BalyoSimulation\_4.17.0\_v1.1

## BalyoSimulation

- Add BalyoSimulation\_4.17.0\_v1.1

## Bug fixes

- #55835 - Fix bug battery value in the report (table times and counters)
- #55880 - Fix bug opc config not updated when renaming a battery point

# ROAD EDITOR 2.15.0

2024-10-23 / BalyoSimulation\_4.16.0\_v1.3

## New features

- #54324 - Depending on the users and the state of the projects, the simulation is used in various ways. During the simulation, instead of having to activate and deactivate all the options needed by the users, presets of the simulation displayed can be used: demonstration, analysis, productivity results and custom configurations.
- #53419 - In the flows configuration menu, the "summary" button displays a table of all the defined flows with their corresponding triggers and an overview of the stations and robots assignment.
- #53414 - To ease the flows definition, the tools "Stations configuration", "Flows configuration" and "Triggers configuration" are part of the same tool "Flows configuration".
- #53806 - The feature that allows to align racks and stock zones can now align points as well. Warning ! The point movements are confined if snapped, locked, or snapped to a locked segment.

## Changes

- #52315 - In the simulation report, create a small section to know which robots have been reset automatically during the simulation.
- #55421, #55110, #55181 - *With render2 display*, performance has been optimized by reducing draw calls with instanced icons. The devices, notes and chargers are now instanced. The segments & measurers draw calls have been reduced. The preview while using the shape tool has been improved too.

## Bug fixes

- #55087 - In the simulation report, the inputs suggested in the "Start collecting time" section exhibited inconsistencies.
- #53613 - During the simulation, the deadlock coloration was kept even if the deadlock was already manually solved.
- #54358 - Using "[" in layer name resulted in corrupted circuits.
- #55288 - Using a collaborative room, the imported circuit was only visible to the individual who performed the import and not to all project collaborators.

- #55464 - *With the render2 display*, after applying a small movement to a rack, the rack sometimes did not appear or had the wrong colors.
- #55644 - Using a collaborative room and *with the render2 display*, switching to another circuit triggered a crash of the application.
- #55109 - *With the render2 display*, the measurers & segments interactivity has been fixed.

## ROAD EDITOR 2.14.8

2024-10-16 / BalyoSimulation\_4.16.0\_v1.3

### Bug fixes

- #55205 - Revert auto fix wrong computation of the turn. To use this fix you need to write the function in the console.

## ROAD EDITOR 2.14.7

2024-10-14 / BalyoSimulation\_4.16.0\_v1.3

### Bug fixes

- #55205 - Fix wrong computation of the turn.

## ROAD EDITOR 2.14.5

2024-10-11 / BalyoSimulation\_4.16.0\_v1.3

### Bug fixes

- #55461, #55486 - In the simulation, the robots were going to the same source and destinations

## ROAD EDITOR 2.14.4

2024-10-10 / BalyoSimulation\_4.16.0\_v1.3

### BalyoSimulation

- Upgrade from BalyoSimulation\_4.16.0\_v1.1 to BalyoSimulation\_4.16.0\_v1.3

### Bug fixes

- #55097 - [SIMU] Robot stuck at door

## ROAD EDITOR 2.14.2

2024-10-09 / BalyoSimulation\_4.16.0\_v1.1

### Bug fixes

- #55372, #55364, #55255 - Fix itinerary unavailable when we create a turn. With this, we also maintained connections between segments and turns when we moved an element.

## ROAD EDITOR 2.14.0

2024-10-07 / BalyoSimulation\_4.16.0\_v1.1

### New features

- #52221, #52824 - In circuit Edition mode, with a right click on a shape, the user has the possibility to add the shape to a station as a new station to ease the flow configuration process.
- #49754 - In the flow configuration, the user has the possibility to add several stations as a flow step.  
For example :  
If a flow1 is a pallet movement from a stockzoneA to X but it also exists a flow2 that goes from stockzoneA+stockzoneB to X  
Before we would create station1= stockzoneA, and station2= stockzoneA U stockzoneB. Now, we will create station1= stockzoneA and station2= stockzoneB. Flow2 will be defined as going from [station1; station2] to X.  
In projects where the positions are shared by several flows, it is easier to define and understand.
- #53709 - In the rack editor, the cell templates can now be created by duplication.
- #53162 - In the zone definition, a new traffic attribute named "TrafficByID" allows access to the zone to a list of robots.
- #53734 - Link to the customer option "Infrared barriers management" in SDK 4.15.1, in Road Editor, the users can define event names in the zones parameters
- #54196 - Using the render2 display, movements with keyboard arrows are available
- #54195 - Using the render2 display, in the search shape dialog, the behavior link to the buttons to hide and zoom into a selected shape are available.
- #53714 - Using the render2 display, during simulation, the robot tooltip displays all the robot data

### Changes

- #52002 - Better auto extended length computation to prevent the RPKapproach from being in the curve
- #48464 - For the measurers, a line has been added at the end of the arrows to make the measurer more precise
- #53146 - In the simulation report, the flow duration statistics graph now consider the start collecting time

- #53710 - In the rack editor view, the color of the beam related to the start height has changed from orange to green to differentiate the definitions.
- #51776 - In the simulation, no more missing tracks warning if the robots model designated is not used in the simulation
- #51773 - In the station configuration, the shapes can be filtered by type "Conveyor"
- #52266 - For the racks, include the extended length id in the position object
- #53169 - The custom step editor was missing some explanation/tooltip
- #55021 - #55005 -#53713 - *In the render2 display*, the display of the grid label and the measurers lengths has been improved for readability. The display of the texts has been reworked to increase their performance.

#### Bug fixes:

- #55127 - In the simulation, the scheduler configuration file could not be used by SDK because of an error in the naming.
- #54207 - In the simulation, the old chargers of the opc configuration were not deleted correctly
- #53977 - #53219 - In the stock zone editor view, when we chose the repetitive pattern, the option to change the number of lines/slots per group or line was not working properly
- #53858 - In the flow configuration, when moving a flow step, a display bug appeared
- #53805 - When changing the start height of a conveyor, the extended length arrows moved visually from the center
- #52918 - No more error message in the console when changing the device type

## ROAD EDITOR 2.13.9

2024-09-26 / BalyoSimulation 3.1.25

#### Bug fixes

- #55010 - Strange behavior when moving racks with the keyboard arrows

## ROAD EDITOR 2.13.8

2024-09-20 / BalyoSimulation 3.1.25

#### Changes

- #54848 - [SIMU] Add a button to enable the new dispatcher

## ROAD EDITOR 2.13.7

2024-09-17 / BalyoSimulation 3.1.25

## Bug fixes

- #54688 - Draw measurer not working well when 90° snap enabled

# ROAD EDITOR 2.13.5

2024-09-12 / BalyoSimulation 3.1.25

## New features

- #52824 - Choose which version of the Balyo Simulation package to use for a given project simulation. The Balyo Simulation package is not an SDK version but a module that includes the emulation of robots, the scheduler, the dispatcher, the traffic, etc. which are implemented and evolve because of SDK improvements. Therefore, the current Balyo Simulation v3.1.25 corresponds to the behavior of SDK 4.15. There will not be packages (retrofit) that represent earlier versions of the SDK, but there will be versions that represent the next big SDK changes.
- #52351 - In the simulation, the option “enable charging” parameter is now saved
- #50355 - In the simulation definition, the users are able to multiply the throughput of the triggers uniformly. The standard use case is after a first simulation, the triggers are not creating enough tasks, so the user may want to increase the number of tasks from different flows uniformly.
- #51911 - Users are now able to add offsets to the aisle middle segments. By doing so, the drawing of standard racks for robot models such as the Reachy is eased. The requisite is to draw the racks, then by using this new feature, Road Editor detects the aisles and draws segments in opposite directions at the desired distance from the middle of the aisle for an entire layer.
- #53614 - It is now possible to split a rack in two at a glance.
- #46001 - A warning is now displayed if the extended length defined is smaller than the auto calculation of the extended length.
- #53658 - In zone, define broadcast options to use in the customer option feature for infrared barriers management
- #53049, #53052, #53051, #53050 - First version of the definition of elevators in circuits to use in customer option features to travel through a lift.
- #53789 - *In the render2 display*, implement the track coloring when using the simulation and traffic tools to represent the traffic cantons.
- #53530 - *In the render2 display*, Implement the visualization of the pallet overflow in the racks.
- #50069 - *In the render2 display*, drag u-turns to move them

## Changes

- #53651 - In Road Editor interface, a third mode has been added: the traffic editor mode in addition to the Circuit edition and Flow configuration modes
- #54480 - For the Rack position analysis feature, improve the deltaX/deltaY recommendation with linear regression

- #53723 - For the Rack position analysis feature, improve the understanding by zooming on the graph
- #53722 - For the Rack position analysis feature, improve the understanding by displaying the graph with the same scale for both axis
- #53725 - Standardize the number of digits used to define shape orientation
- #53647 - For the route tool, the “keep display” switch has been added
- #53523 - During the simulation, display the task step in the scheduler view
- #53335 - Improved the performance when drawing a lot of turns at once
- #53331 - During the simulation, display 'unknown' instead of -1 when we do not know the speed of the robot in the Simulation Report
- #52360 - In the simulation report, the "waiting time" can be displayed in the graph representing the duration of the tasks
- #52026 - After a simulation, the replay trigger can be used when cascading tasks exist
- #50371 - Improve the "Validate" button of the "maximum simulation time" of the simulation

### Bug fixes

- #52842 - For the Rack position analysis feature, it was not possible to import two csv files that have the same name.
- #52110 - When importing the simulation configuration from another circuit, duplicates of names in the station, flow and trigger definitions could appear.
- #54181 - Some turns were not properly exported in the SynaOS export

## ROAD EDITOR 2.12.5

2024-08-26 / BalyoSimulation 3.1.25

### New features

- #50457 - For the simulation, in the buffer trigger configuration, the moment the next task will appear (after a pick, or drop or else) can be chosen in order to better emulate real-world conditions (on conveyors for example)
- #52433 - In the simulation menu, a switch option allows the use of SDK 4.15.0 feature “Deadlock solver”. The deadlock solver feature aims to allow a robot to cross a red canton to unblock the situation in the case of a deadlock. It does not reroute robots to solve the issue.
- #52430 - The Commissioning Experts team has prepared the **“Circuit library”** document to explain the circuit design of specific scenarios and limitations. This document is now linked within Road editor.
- #53142 - *In the render2 display*, during the simulation, the itineraries can be shown.
- #53007 - *In the render2 display*, when right clicking on a shape (zone, etc.) while having several shapes selected, the context menu appears.



- #52960 - In the *render2 display*, if a release of the designated project exists in Map Editor with the same name, upload the bird view image automatically as a background in Road Editor with the right scale and position.
- #52512 - In the *render2 display*, restore the multiplayer compatibility to be able to draw circuits using the collaborative mode.
- #51460 - In the *render2 display*, implement the measurer behavior to match the previous render by adding arrows to interactive & non-interactive measurers, improving the length value display of interactive measurers, reworking the management of the arrow dragging.

## Changes

- #51100, #49470, #52719, #52720, #52722, #52723 - Standardize the definition of throughput in the flow definition, in the trigger definition, during the simulation and inside the simulation report to avoid ambiguity when talking about an amount of tasks or pallets.
- #52101 - During the simulation, detect if the computer is in “power saving mode” and display it as the simulation is impacted negatively (slower).
- #52691 - For more consistency, the advanced errors monitoring switch has been removed just to keep the collapse menu.
- #52901 - In the stock zone menu, standardize the button display with the "Edit Parameters" in blue.
- #49168, #49167 - When saving devices comboxGen2, if the LoraID is missing or not unique, a warning is displayed stating the issue and which device is not well configured.
- #53405 - In the *render2 display*, the lines have been improved (antialiasing).
- #50878 - For VDA5050 *investigation*, the stock lines are exported with their stock lines names as identifiers. This change only impacts the team in charge of this feature that benefits from a special circuit export.

## Bug fixes

- #52978 - When using the simulation and setting the advanced errors behaviors as “reset robots”, when a deadlock appeared, the interface did not refresh after the automatic reset.
- #52666 - When enabling the randomization of slots in stockzones and playing the simulation, the randomization of position in lines did not work, the robots continued to go only on the last positions of the stock zones.
- #52053 - During simulation, buffer triggers could create too many tasks.
- #52721 - In the trigger definition, for interval trigger, the field throughput was not affected by the field "count" which represents the number of tasks created at each time iteration. The formula of the task creation throughput is  $\text{throughput}[\text{tasks/hr}] = \text{count}[\text{tasks}] \times 3600[\text{s}] / \text{interval}[\text{s}]$ .
- #52193 - In the points configuration, the initialization score textbox reset the value to 1000 when it reached 0.

# ROAD EDITOR 2.11.1

2024-07-25 / BalyoSimulation 3.1.24

## Bug fixes

- #53424 - Robots finish their stop before turn with incorrect heading for turns with a non-null start point offset

# ROAD EDITOR 2.11.0

2024-07-24 / BalyoSimulation 3.1.24

## New features

- #53008 - In the point definition, ability to select a battery type to configure destination battery point and use this data in the opportunity charging during a simulation.
- #48121 - Ability to configure the opportunity charging thresholds per group of robots: the workloads definitions and corresponding battery levels thresholds. These OPC parameters are saved in a file opcConfig.json, so that the simulation respects the configuration but also the live project.
- #51093 - Ability to choose which charger a robot goes to charge during opportunity charging. The choice is saved in a file opcConfig.json, so that the simulation respects this configuration but also the live project.
- #51246 - To avoid losing simulation data by error, a pop up window asks for confirmation when leaving the simulation tool if a simulation has already been started.
- #48515 - Ability to see and edit the scheduler configuration. When the scheduler configuration is set at "Custom", a menu will appear to customize it, save it in the schedulerConfig.json and use it for the simulation but also live project.
- #49959 - Implement an analytics tool to get some data from the users to let us understand better how the users use Road Editor and to make better roadmap and feature prioritization decisions. A snackbar will appear with the question "Allow cookies to improve your experience" with the choice to "Deny" or "Allow".

## Changes

- #52516 - Improve the gabarits computation to avoid delay after clicking on "Show gabarit" button. The gabarits computation is now made in a web worker.
- #52434 - In the default scheduler configuration, set the due date weight as 10 instead of 0 so that if the user provides due dates the tasks should be prioritized whereas if no due dates are provided, this field will be completely ignored by the scheduler meaning the high weight of dueDateCost will have no impact.
- #52262 - Display warnings when the names of the truck or the truck serial numbers are too long (more than 31 characters)

- #51270 - When one clicks on the “Reset View” button, if there is no lidar navigation map but a layout image is used, the Road Editor dashboard will focus on the layout image instead of the coordinates (0; 0) before.
- #47282 - To ease the circuit edition, the pallet overflow in the rack is displayed with little guide-line around the rack. If several values are used in the same rack, the line will represent the maximum value among them.

### Bug fixes

- #53026; #53012 - Improve the calculation of the flow throughputs when using a “start collecting time”.
- #52602 - With the render2 display, improve the color visibility when hovering and selecting circuit elements.
- #52531 - With the render2 display, improve the lidar navigation map display to avoid having empty lines of pixels where there should not be.
- #52455 - Avoid losing the lidar navigation map display when switching between display mode (with or without render2).
- #52493 - Improve the unicity of names when creating zones to avoid duplicates.
- #52362 - In the simulation, fix the battery level that goes to 100% and does not decrease anymore.
- #52268 - Close the circuit element parameters menu when switching to Flow configuration mode and selecting a tool.

## ROAD EDITOR 2.10.1

2024-07-09 / BalyoSimulation 3.1.22

### Bug fixes

- #52561 - Unsatisfying trajectory in turns in front of slots for radius with tiny radii

## ROAD EDITOR 2.10.0

2024-07-03 / BalyoSimulation 3.1.22

### New features

- #49131 - In the Rack Position Analysis, suggest correction of rotation of the racks using the RPA data.
- #48686 - In the simulation, ability to create a cascade of tasks with triggers
- #52042 - Ability to load a custom opportunity charging configuration and use it in the simulation. The file opcConfig.json has to be located at the root of the project.
- #51578 - In the simulation, the users can now choose how the robots behave when encountering deadlocks or minor errors. By default, the behavior is set to “stop” the simulation when these events appear. Now, the simulation can also “continue” or the robot can be “reset to taxi”. Warning ! The fatal errors will still stop the simulation.

- #50852 - In the simulation, when creating a task, the due date is now filled in with the content from the flow definition, the "maximum task time" parameter when it is defined.
- #50472 - In the simulation, when hovering a robot stuck in traffic, the robot that blocks this robot is highlighted with a yellow border.
- #52014, #51594 - With the render2 display, the stock zones display can be filtered, their names are displayed as before and can also be filtered
- #51488 - With the render2 display, the robots are displayed in simulation
- #51461 - With the render2 display, the turns creation has been restored using the Create segments tool with ctrl key and Create turns
- #51310 - With the render2 display, restore the ability to move a multiselection of elements
- #49271 - With the render2 display, prevent the selection of a shape from another layer except the stockzones and racks
- #51224 - Ability to display a gabarit corresponding to ISO 3691-4 standards (0.5m clearance on either side of the truck in most situations). This gabarit is "Shape+ 0.5m"

## Changes

- #52244 - When the user decides to change its working layer but a selection of shape exist, the selection is now canceled
- #52217 - Allow to "Undo change" (Ctrl + Z) after a "Clean up excess segment lengths" action
- #52029 - When editing the battery type of robots, a filter could be applied to simplify the choice of the user
- #52001 - In the rack definition, the default value of safety margin defined in the cell templates is now 50mm to be coherent with the project code.
- #51921 - To avoid confusion, the Road Editor modes have been renamed. "Legacy" mode is now called "Standard" mode, the "Normal" mode is now called "Preview" mode, and the explanation is "The standard mode exports the circuit in a former format (XML) in addition to the new Road Editor format."
- #51593 - During the new project definition, there is not unnecessary zeros when selecting the robot quantities
- #51363 - Ability to switch between Circuit modification and Flow configuration thanks to keyboard shortcut "backspace" key
- #51886 - The comboxGen2 definition of hardware properties has been modified to be able to install comboxGen2 as a retrofit for comboxGen1.
- #51774 - The layout image configuration menu has a fixed size now. If the name of the image is long, the name will be truncated, but can be seen entirely when being hovered.
- #52043 - In the simulation, when using the default opportunity charging configuration, we make sure to use only one charger type per battery point.
- #52027 - During the simulation initialization, the charging step display has been improve
- #51704 - In the simulation scheduler configuration, the creation date weight of the standard configuration is now set to 1.

- #51625 - During the simulation, when a robot is hovered, it's itinerary is highlighted

### Bug fixes

- #52533 - When trying to assign a cell template to a multiselection in racks, the app crashed
- #52325 - Avoid duplicated ids of slots in the same column
- #52240 - In the search shapes dialog, the slots and stocklines were displayed regardless of the selected layers
- #52234 - "Detect Aisles" feature was failing
- #51955 - In the simulation, the task does not seemed to be created because of some invalid characters returned by the event
- #52279 - In the simulation, OPC battery destination could be unknown
- #52035 - In the simulation scheduler menu, the display of the robAuth of the OPC task was always empty
- #51970 - On the circuit, when you hide the layers the gabarits were still displayed
- #51935 - The robot itinerary was not taking the right segment in specific case
- #51887 - A wrong ioCount was exported for ComBox gen 2 standalone
- #51724 - With the render2 display, there were some difficulties zooming on the map when opening an open project.

## ROAD EDITOR 2.9.3

2024-06-17 / BalyoSimulation 3.1.19

### Changes

- #50878 - Export stock zones in the SynaOS export

## ROAD EDITOR 2.9.2

2024-06-12 / BalyoSimulation\_v3.1.19

### Bug fixes

- #51957 - In the simulation, it fixes issues with the Opportunity Charging (OPC)
- #52284 - Fixes issues to login for users having a lot of personal information

## ROAD EDITOR 2.9.1

2024-06-06 / BalyoSimulation 3.1.17

### New features

- #49892 - Ability to add selected rack cells or all rack cells to stations from the rack editor view
- #49893 - Ability to add selected shapes to a station with the right click
- #51239 - In the robots menu, ability to change the battery type.

- The render2 is available as an alpha feature. render2 is a rewrite of our rendering engine with a 3D engine. It offers better performance but is still in development. Consider using it for large projects but it might lack a few features and might have some bugs.

## Changes

- #51603 - Space more turn points to have better turret angle computation. When the points are too close (less than 3 mm), they are removed.
- #51780 - Display when the performance mode is enabled
- #51606 - Add warning icon next to “show gabarit” toggle and in the layer menu option to emphasize when the gabarit filter is off
- #51831 - Update the minimum recommended upright width to the new TTC value: 3 inches or 75 mm.
- #51271 - The training documentation link embedded in Road Editor has been changed to allow users to look for words using the CTRL+F command.
- #50113 - The tool to clean the excess segments can now be applied on single segments or a selection of a circuit.

## Bug fixes

- #51624 - In the simulation report, it is better not to have the "Task Performance Analysis" part when you have no finished task
- #51445 - In the simulation, the custom event “forks target” used in custom steps now works to define a fork's height to reach.
- #51937 - In the simulation, when defining a custom event on a custom step, it is now applied only on the custom step and not on all steps of a task.

## Known issues

- The Opportunity Charging is being fixed and may not be fully functional on this version.

# ROAD EDITOR 2.8.0

2024-05-15 / BalyoSimulation 3.1.12

## New features

- #46858 - In the simulation, the report can now consider a “**start collecting time**”, events before this time are ignored
- #51028 - In the simulation report, the **task times are now plotted in a graph**
- #47048 - In the simulation, a “**maximum task time**” objective can now be set for flows and are displayed in the report
- #50361 - In the simulation, **priorities** can now be defined for triggers
- #48974 - In the simulation, an **advanced traffic management debug display** is now available to see the traffic portions reserved in real time

- #50506, #50859, #50860 - In the simulation, the **robot is highlighted** when in error or in deadlock, and it is more explicit when its itinerary failed
- #49288 - New data are exported for the future StockDB
- #50436 - The user is now alerted when several trucks have the same IP address
- #51021 - Ability to rotate the whole circuit

### Changes

- #50669 - In the simulation, a progress loading is now displayed
- #50970 - In the simulation, a checkbox to enable/disable all triggers in one click is now available
- #49980 - Additional warnings have been added in the rack editor
- #50282 - Highlighted turns are now always displayed on the foreground
- #50792 - Racks uprights are not hidden anymore while dragging
- #51357 - The check flow feature is now much faster (~x5)

### Bug fixes

- #48540 - The cost of the certain turns have now a better computation in the itinerary computation
- #49716 - Keep display fixes in the traffic tool
- #50947 - With some conditions, robots could take tasks of a flow that was not enabled for him
- #51415 - The align tool was not updating connected turns
- #51457 - In the check flow feature, the pathFag of the robots is now used

## ROAD EDITOR 2.7.1

2024-05-06 / BalyoSimulation 3.1.8

### Bug fixes

- #51545 - Do not pop an error when a projet map tile birdview has not been found

## ROAD EDITOR 2.7.0

2024-05-06 / BalyoSimulation 3.1.8

### New features

- #46427 - **Birdviews** (3D layout images) can now be loaded automatically from the Map Editor cloud
- #46592 - **Birdviews tiles** are now loaded depending on the viewed part of the site and the zoom level, like in Google Maps! Allowing us to load super huge bird views.
- #50542 - In the simulation, users can define **custom steps** such as wait times or forks movement at key moments of the mission
- #50368 - In the simulation, display the **robot source and destination**

- #46858 - In the simulation, the **list of tasks** is now displayed
- #49845 - In the simulation report, display the average (and sum) times spent by the fleet

## Changes

- #50717 - [SIMU] Buffer trigger per flow
- #50881 - [SIMU] Improve the report pdf generation
- #50622 - [SIMU] Display the Road Editor & BalyoSimulation version in the report
- #50639 - [SIMU] Add a minimize tab option on Simulation Configuration window
- #50585 - [SIMU] Display the task name (or flow name) in the robot tooltip
- #49522 - [SIMU] (flow) Add a warning (or error) when a station has no position
- #50787 - In the route tool, preload the circuit when opening the toolbox + does not load the circuit for each itinerary
- #47560 - [CIR] (rack) Height of the load can't be defined in rack editor
- #50872 - Allow doors to be "zone with points" and not always "gabarit"
- #50528 - Change id of default cell templates to "int"
- #50770 - Prevent users actions while recomputing turns while changing a turn to draft
- #50295 - [Route] Initialize path flag value from robots model preference files
- #50145 - [RACK] Update load appearance
- #49717 - [CIR] Ensure gabarits are drawn behind the shapes
- #49287 - [CIR] (init) When using project initialization and creating a new circuit, it is not defined as the default circuit
- #48758 - [CIR] (init) When using project initialization and adding a map, it is not defined as default map
- #50671 - [CREATE PROJECT] Emphasize that MCs are Hyster products

## Bug fixes

- #50915 - In the context menu, the robots options are still available in circuit edition when a robot has been previously selected in simulation
- #50691 - [SIMU] Simulation does not always pause when clicking on pause
- #50656 - "Clean Excess Length" breaks 'parallel turns' when they are connected to something
- #50473 - Feature 'Connect all to a segment' does not work if the segment is locked
- #50461 - [TURNS] Display warning/error if radius under minRadius
- #50354 - Draw turn button does not work anymore to link extended length to kernel
- #50278 - [SIMU] (battery) Time spent in battery by robot doing a battery mission is wrong in the report
- #50023 - [CIR] (rack) rack naming after several racks made Road Editor Crash
- #50704 - [SIMU] (battery) Error with the battery mission
- #50664 - [SIMU] Errors popping for a really short period of time
- #50446 - [SIMU] Sim not running with 30 trucks



## ROAD EDITOR 2.6.3

2024-04-04 / BalyoSimulation 3.0.0

### Changes

- Update the SynaOS export

## ROAD EDITOR 2.6.0

2024-04-02 / BalyoSimulation 3.1.0

### New features

- #42906 - Is it now possible to detect automatically the aisles between racks and create their associated zone, a middle segment can also be created automatically
- #49913 - Import the simulation configuration from another circuit
- #47758 - In the simulation, the current robot forks height is now displayed
- #50108 - In the simulation, it is now possible to display all robots data (tooltips) at once
- #49535 - In the simulation, the user is now able to choose whether to pick/drop at the end of the stock line or a random slot

### Changes

- #49592 - Ability to choose whether the computed itineraries are displayed or not when using the "Check flow" feature
- #49847 - The user can now abort a "check flow" action
- #48754 - The current itinerary of a robot is now displayed when hovering it, even when the simulation is paused
- #50144 - The user is now acknowledged when the circuit file is corrupted because the git lfs files have not been pulled
- #49984 - The filter menu width is not impacted anymore by a long layout image file name
- #50287 - Performance improvements for displaying a large list of positions in the station configuration
- #50297 - In the itinerary tool, it is now possible to reverse the route
- #47438 - In the itinerary tool, the user can now keep the last itinerary displayed in the other tool

### Bug fixes

- #49994 - In the simulation, changing the speed of the simulation while being paused was restarting the simulation (in the background)
- #48779 - In the simulation, the x100 create task button now works properly with huge projects
- #49409 - The "Combox gen 2 button" has now back the proper number of inputs and outputs

- #50120 - Some buttons were not properly aligned anymore in the Stock Zone Editor
- #50204 - The initial battery dialog button was hidden when the screen was not large enough
- #49952 - Turns between two locked segments were not possible anymore
- #49978 - The gabarit computation was wrong for turns when the performance mode was enabled
- #50293 - Station display issue in the flow configuration
- #50564 - Fix a small UI regression in the rack editor and improve a bit the interface
- #48512 - Limit number of Combox Gen 2 Devices per Combox Gen 2 Gateway

## ROAD EDITOR 2.5.3

2024-03-13 / BalyoSimulation 3.0.0

### Bug fixes

- #49714 - Parallel turns connected to extended lengths (racks and stock zones) were not connected anymore properly

## ROAD EDITOR 2.5.0

2024-03-06 / BalyoSimulation 3.0.0

### New features

- #48273 - In the simulation module, users can now choose the **initial battery level of robots**
- #49349 - In the simulation module, the user is now warned when the old dispatcher is enabled, making it impossible to run properly a simulation

### Changes

- #49228 - Improvement of the UI of the rack position analysis dialog
- #49791 - Improvement of the performance of the rack naming tool
- #49759 - Improvement of the naming of a toolbox
- #49145 - Improvement of the performance when deleting a layer that contains a lot of shapes
- #48904 - Generated simulation PDFs are now fast to open in Google Chrome
- #48168 - Improvement of the UI of the simulation toolbox

### Bug fixes

- #49865 - the preference fireAlarm/deviceNames is now properly spelled
- Fix regressions with racks due to the undo/redo feature
  - #49744 - Allow the multi-disabling of cells
  - #49281 - Propagation of the column parameters to other columns do not update all columns at once

- #49517 - Fix a typo in the preferences export related to the combox gen 2
- #46893 - Fix line endings issues with some files saved after using the collaborative mode

## ROAD EDITOR 2.4.0

2024-02-29 / BalyoSimulation 2.8.9

### New features

- #46834 - Users can **create project** in collaborative sessions
- #47669 - All robot models are now available in the **create project** menu
- #42067 - Excess segment lengths can now be **easily cleaned**
- #48544 - In the simulation, the users are now acknowledged when a taxi point is missing
- #45215 - Portions that will be edited when changing a traffic type are now highlighted

### Changes

- #48268 - The parameter "Maximum duration" of the simulations is now saved in the circuit and thereby persistent
- #48755 - When creating a project, the default robot name has been improved
- #47759 - In the simulation, more data is displayed to explain why a robot is stopped in traffic
- #46247 - U-turns are now updated in real-time while being dragged (when the performance mode is disabled)

### Bug fixes

- #49362 - Fix a crash when clicking on a turn while having a project with misconfigured robots
- #48807 - A notification was spamming when deleting an hidden layer
- #49415 - Gabarits were not displayed on long start point offset turns

## ROAD EDITOR 2.3.4

2024-02-29

### Bug fixes

- #49735 - The app was freezing when changing "Start Point Offset" of a turn

## ROAD EDITOR 2.3.3

2024-02-16

Bug fixes

- #49514 - Turns on locked segments were not attached properly

## ROAD EDITOR 2.3.2

2024-02-15

Bug fixes

- #49261 - Drawing turns to locked segments were not attached properly

## ROAD EDITOR 2.3.0

2024-02-08 / BalyoSimulation 2.8.9

New features

- #48532 - **Automatic robot health issue diagnostic**
  - It is now possible to detect when some robots do not have the same measures as the rest of the fleet
  - This tool can help identify more easily differences between robots (calibration, etc.)
- #46105 - Better support of the **Combox Gen 2** (Gateway, Device, Standalone / Standard, Extended, Buttons)
- #43855 - It is now possible to **duplicate a layer**
- #47660 - New type of triggers: the **trigger replay**, it is now possible to save all the tasks created in a simulation and replay them in another simulation
- #48196 - It is now possible to create a trigger replay from a **CSV** file
- #42107 - The undo/redo (CTRL+Z/CTRL+Y) feature is now available in the Rack Editor
- #47305 - It is now possible to **align elements**
- #47580 - Ability to **export a CSV file** with all the **slots** (their ID and name)

Changes

- #47438 - It is now possible to drag a u-turn past the end of a segment
- #47757 - In a simulation, the robot speed is now displayed when the user hovers a robot with his mouse
- #48514 - The scheduler configuration is now displayed in the simulation report, so everyone knows which parameters have been used to compute the throughput
- #48677 - An error is now displayed when the truck names are missing in the preference files
- #48748 - The images for the MPE080 and the MP080 long robots (Hyster) have been added
- #48165 - The keyboard hotkeys are now disabled during a simulation
- #48164 - Some unnecessary modules are now hidden during a simulation

### Bug fixes

- #48306 - The battery tasks are now available in the report performance analysis
- #48774 - The simulation had major issues when all the robots were not emulated
- #48779 - The create task buttons were not working everytime in the simulation
- #49067 - The scheduler configuration displayed value were sometimes reset

## ROAD EDITOR 2.2.0

2024-01-25

### New features

- #43859 - Emphasize collisions between the elements gabarits and the lidar navigation map
- #48337 - An interface to change the scheduler configuration is now available
- #43856 - Transfer all shapes of a layer into another one
- #42106 - Display all gabarits of a layer at once
- #48200 - It is now possible to create several tasks at every execution of an interval trigger

### Changes

- #48230 - The default name of new layers has been updated to prevent users from thinking a layer is linked to a robot model
- #47434 - Users can now copy segments coordinates in an easier way

### Bug fixes

- #48647 - It was not possible to select a locked point by doing a left click on it
- #48422 - The layout image was not displayed in front of the navigation map when editing it
- #48317, #48250 - When creating super small shapes, Road Editor was sometimes crashing
- #48305 - In the simulation, the robot was not continuing to work when the charger was busy and its battery level ok
- #48304 - In the simulation, the robot was not prioritizing the charge tasks over standard tasks
- #48272 - There was issues in the battery time displayed in the simulation report
- #48263 - Flow with long names were leading to simulation issues
- #47848 - Fixing some actuator speed too far errors in the simulation
- #46816 - Robots were still considered if present in the project folder but not inserted in the current project

## ROAD EDITOR 2.1.2

2024-01-15

### Bug fixes

- #48313 - Robot assignation was not respected during simulation

## ROAD EDITOR 2.1.0

2024-01-11

### New features

- #47790 - It is now possible to test that all slots of a flow are reachable
- #46460 - Add default gabarit per layer
- #48131 - In the station configuration menu, an "add all positions that match" button has been added
- #47927 - New types of portions have been added (DeadEnd-Entry and DeadEnd-Exit) to optimize the traffic especially for conveyors, available only with SDK 4.15 or more

### Changes

- #48166 - When first created, the flow triggers are now activated by default

### Bug fixes

- #48186 - Crash when clicking on a segment or a turn when robots are missing in the prefs
- #48148 - When enabling back an interval trigger, it was creating tasks for the elapsed time it was not enabled
- #47008 - False positive snackbar when deleting conveyor and its zone
- #48269 - Task creation for flows that were defined with a stockline as a station did not work properly
- #48257 - Unlink the measurers associated with a rack/stock zone/zone when deleting the shape

## ROAD EDITOR 2.0.0

2023-12-22

### New features

Road Editor 2.0 introduces the simulation.

Implemented features:

- Create and configure your stations
  - They are groups of slots, racks, stock zones, stock lines, points
- Create and configure your flows

- Assign robots to flows
- Create and configure triggers
  - Triggers let you defined how the tasks are created in the simulation
- Robots
  - See the robots moving
  - Read their state (traffic, forks moving, etc.)
  - Drag & Drop them wherever you want them to be!
  - See their itineraries in real-time
- Report
  - Read a report with meaningful data
  - Analyze a task to criticize the result and help the R&D to check that the simulation matches the reality
- Charging
  - Robot loose battery and goes to charge
  - Opportunity Charging (OPC - the smart system to optimize the fleet charge of the robots), but not configurable yet

What's not working:

- **VNAs are not supported** yet, they are expected with SDK 4.15
- The project code (in Kiwi) is not supported and never will be

## ROAD EDITOR 1.42.0

2023-12-18

### New features

- #41224 - Insights are now available to automatically correct the rack positions
- #47473 - A new action is available for zones: it is now possible to request a manual acknowledgement in the zone if a safety is triggered (requires SDK 4.14)

### Changes

- #47719 - When deleting a rack, the enter key can be pressed to confirm the deletion
- #47698 - In the circuit XML file, the rightMinGap value has been reworked when there's a unique pallet in the cell template
- #47572 - Allow user to copy text by doing ctrl+c when a dialog is opened
- #47568 - The experiments options "Display Common" and "Bbox selection" have been removed from the settings and are now enabled by default
- #47565 - The snackbar when importing an XML circuit has been reworked
- #47557 - The Safety Margin text field of the Rack Editor has been reworked

- #47241 - Minimum distance measurers are now attached to the closest solution found
- #47105 - For modbus devices, the function code parameter is not overwritten anymore and can be customized in the file
- #46969 - When logged out users join a collaborative room, they are properly redirected to the room instead of the standard mode after logging in
- #43927 - The compute loads popup has been reworded to explain disabled loads

### Bug fixes

- Different improvements of the collaborative mode under the hood
- An auto-fix of the circuit (that does did nothing but improve the circuit size for nothing) for some circuits used with the collaborative mode
- #47633 - Pressing CTRL+Z with a german (QWERTZ) keyboard was not working
- #47567 - Sometimes, the origin/destination was inverted when attaching a turn to a segment
- #47122 - It was not possible to click on the first column deletion icon in the rack editor
- #47426 - Sometimes we were not able to select some stock zones
- #47417 - Slot names were still considered in racks after deletion
- #47642 - Better error message when the lidar navigation map file is corrupted

## ROAD EDITOR 1.41.2

2023-12-05

### Bug fixes

- #46381 - Project was being saved indefinitely
- #46972 - Some projects were experiencing crashes in Collaborative mode

## ROAD EDITOR 1.41.1

2023-12-01

### Bug fixes

- #47427 - Road Editor was crashing when opening a circuit with an imported layer (from a legacy XML circuit) that the color has never been changed

## ROAD EDITOR 1.41.0

2023-11-30



## New features

- #47354 - A performance mode has been introduced, it can remove some extra features to improve the performance for large projects, for instance it decreases the number of points of the turns
- #46302 - A project folder can now be initialized from Road Editor with the selected robots and can be received in your mailbox
- #46923 - The itineraries distance and duration are now displayed, the duration is currently an estimate and will be improved in the next versions of Road Editor
- #45961 - Zone enter and exit events

## Changes

- Better handling of slow internet connections for Road Editor collaborative mode
- #46745 - Better display of the spaces in the rack position names
- #46875 - Define a minimum area for a zone while resizing
- #46265 - Combox gen 2 buttons have new pins names
- #44201 - Draft layers are not considered anymore in the portions computation
- #45214 - New data displayed in the robot dialog
- Drag handle (green point) are not displayed anymore for turns connected to extended length
- #45118 - A warning is displayed if the detected CORE version is below 29 given that the feature is working from the version 29

## Bug fixes

- #46832 - It was not possible to move a measurer when one endpoint was attached and the snap 90 degrees mode was enabled and the lock orientation mode was enabled
- #47040 - Invalid cell template in clipboard when copying racks between projects
- #47309 - The "go back to move tool" settings was not working anymore
- Regression : when circuit file is not found, display "circuit file not found" instead of "corrupted"
- #47433 - It was possible to delete extended lengths
- #46897 - Using " in shape names or note or comment was corrupting the geojson circuit

# ROAD EDITOR 1.40.4

2023-11-28

## Bug fixes

- #47427 - Stock lines names were reset when moving another object with the stock zone selected

# ROAD EDITOR 1.40.3

2023-11-16

## Bug fixes

- #46931 - Fixing tiny tiny misalignments in portions that could cause robots to slow down in straight lines

# ROAD EDITOR 1.40.1

2023-11-13

## New features

- #42798 - The **radius** of turns defined by start point (racks, stock zones) is now displayed
- #44288 - **Stock lines names** can now be **displayed** on the circuit
- Stock lines are now searchable in the search shape dialog

## Changes

- Permissions have been added, if you see a message like "You don't have the rights to use this feature or tool", please logout and login, if it persists feel free to contact us
- #46310 - The help has been improved for the pallet overflow parameter in the racks
- #46170 - When renaming a stock line, a check is now done to avoid duplicate names

## Bug fixes

- Several fixes related to the undo/redo feature
- #46341 - Too much spam from renaming all slots in a rack
- Position is now properly exported with combox gen 2 devices
- #46500 - Some devices were not listed in the search shape dialog
- #46501 - When opening the search shape dialog, the slot chip was always ticked even if unticked previously
- #46283 Despite being set to "minimum distance", the measurer was not always displaying the minimum distance
- SVG export fixes with layout images
- #46640 - Tools settings was not persisting as expected
- #46484 - When creating a stockzone, check that the stock line names do not conflict with other names

# ROAD EDITOR 1.39.2

2023-10-24

### Bug fixes

- #46461 - The draw a segment or turn tool was not fully working as expected anymore

## ROAD EDITOR 1.39.1

2023-10-19

### Bug fixes

- #46418 - The display of the rack editor was not including the beam height in the cell height unlike the circuit XML export that was including the beam height in the cell height
  - New behavior: the beam height is included in the beam height (a tooltip is here to help)
  - The exported circuit is not modified, the robots will still pick/drop at the exact same position, only the visual in Road Editor has been changed

## ROAD EDITOR 1.39.0

2023-10-18

### New features

- Ability to display several layout images
- #45012 - Ability to define name of stockline with variables like the rack slots
- #42855 - Ability to set (and lock) the length of a measurer
- #45200 - It is now possible to mirror a rack (apply a vertical symmetry)
- #45372 - Stock zones are now imported when importing a legacy xml circuit

### Changes

- #44422 - Ability to zoom on the preview with the mouse or pad in the stock zone preview
- Shapes are now sorted by shape types
  - points, devices, notes are now displayed at the foreground
  - segments, turns, measurers are now displayed in the middle ground
  - zones, racks, stock zones are now displayed in the background
  - it is still possible to change the order of the shapes (eg. put a point over a note, but not possible to put a point over a zone)
- #44806 - Help lines are now drawn to help the scaling of the layout images
- #42783 - The grid is now displayed over the layout images
- #45990 - A tooltip has been added to remind that the beam height is included in the cell height
- The roof height icon has been updated in the zones
- No whitespace in ioCount export for devices (better coherency) in the install.xml

### Bug fixes

- #45955 - For the racks, changing the parameter of the variable in the naming rules was adding text in the name
- #46236 - When rotating a rack, the extended length was not updated
- #45370 - Under some conditions the measurer was shortened
- #46240 - Bug fixes for undo with measurers
- #44857 - The turns to be updated sometimes kept their dotted style
- #46378 - Changing the segment coordinates manually was not updating properly the connected turns and their portions

## ROAD EDITOR 1.38.0

2023-10-11

### New features

- #43925 - Slots can now be found by name in the search shape dialogs
- #45624 - Measurers can now be attached to racks, zones, and stock zones
- #43836 - It is now possible to define the measurer coordinates to be super-accurate

### Changes

- #45198 - The behaviors in the segments and the measurers are now the same when the snap 90 degrees feature is enabled
- #45860 - Shortcuts and mouse coordinates have been updated to be more visible, especially with a layout image
- In the device configuration, the sample period is now always displayed even if set to the default value
- #44139 - When several turns are automatically changed to "stop before turn", all notifications have been merged into one
- A help tooltip has been added to the "keepWritingOutputs" option in the device configuration
- When Sentry (our error management system) can not be reached due to an ad blocker, an information message is displayed to acknowledge the user
- #45848 - The readability of the devices saved in install.xml has been improved
- #45823 - Change ioCounts for Combox Gen 2 to be properly displayed in the Robot Manager Interface
- Stock lines names are now easier to edit

### Bug fixes

- #45847 - Projects with an invalid lidar map path can now be opened
- #45991 - Locked shapes were not deleted when removing a layer
- #45591 - Fixing issues with snapped points and the undo feature (ctrl+z)
- #45723 - When exporting the SVG circuit and map, the scaling of the lidar map was not always matching the scaling of the circuit shapes

- #45195 - Clicking on a segment was removing the special traffic rules coloring
- Measurers are now fixed when locked
- A issue with the undo feature and the rack extended length
- #46142 - Translate Circuit button did not work if one value was 0
- #45370 - Under some conditions the measurer was shortened
- #46104 - Recently opened projects time was sometimes wrong for people outside of France

## ROAD EDITOR 1.37.5

2023-09-27

### Bug fixes

- #45932 - When adding a new column in a rack, the operation could result to a duplicate id of slot
- #45906 - When renaming a rack outside of the rack editor, the automatically generated slot names were not updated

## ROAD EDITOR 1.37.3

2023-09-26

### Bug fixes

- #45890 - When loading a project, check its next free id value and redefine it if a problem is detected

## ROAD EDITOR 1.37.2

2023-09-25

### Bug fixes

- #45809 - Allow the user to change the name of a shape if there's a conflict in the names of other shapes

## ROAD EDITOR 1.37.0

2023-09-20

### New features

- #42169 - The recent projects used are now displayed when opening Road Editor
- #43256 - Combox gen 2 can be added in the projects as devices
- The most useful hotkeys given the current selected tool are now displayed

- #45076 - Ability to rename shapes name in the search shape dialog
- #45160 - It is now possible to deactivate only one slot in a cell
- #43703 - It is now possible to define the ioCount / ioAddresses / port of the modbus devices

### Changes

- #45559 - The behavior of the layout image scaling has been improved
- Improvement of the “save project” snackbar
- Hidden shapes are not copied anymore for a better understanding of the user
- #45061 - Better warning messages in the stockzones if there's not enough space for safety
- The mouse coordinates are now displayed in the Rack Editor, to help the user to be more accurate
- #45198 - When selecting a measurer endpoint, the arrow is now colored like the segments
- #45196 - Portions with a special traffic type now have a color depending of its layer color instead of the default blue/red
- #43924 - Arrows keys can be used to move in the Rack Editor
- #45152 - When initializing legacy layer groups, the model names are now used instead of the file names

### Bug fixes

- #45209 - It was not possible to copy-paste shapes after importing an automatically scaled layout image
- #45197 - Measurer preview now considers the 90° snap tool
- #45406 - Fix a false positive for a warning (load too large for the column)
- #45436 - A useless confirmation pop-in was wrongly displayed when trying to delete a locked rack
- Better handling of the unicity of the shape / slot / slot line names
- functionCode is now properly named functionCodes when exporting a modbus device in the install.xml

## ROAD EDITOR 1.36.3

2023-09-07

### Bug fixes

- #45584 - The saving in collaborative mode was sometimes failing
- #45613 - A circuit was not openable anymore if you saved it with the current layer hidden

## ROAD EDITOR 1.36.2

2023-09-07

### Bug fixes

- #45467 - It was not possible to create a stock zone or a rack if the safety gen2 of a robot was not defined
- Fixes related to the collaborative mode

## ROAD EDITOR 1.36.0

2023-09-05

### New features

- Collaborative Mode (BETA): users can now edit circuits collaboratively
- Auto extended length: the rack and stock zone extended length are now automatically computed using the robots geometries of the project, the maximum length for all the robots is automatically set
  - A good practice is now to keep the extended length to the minimum value. If needed, it can be extended with the start point offset of the connected turn
- All shapes displayed in the search shape dialog can now be selected and zoomed-in at once
- #44450 - A 'select all connected turns' option has been added on right click on a rack or stock zone
- #44282 - The parameter "beam up margin obstacle" can now be defined in the perception tab of the cell templates
- #43956 - It is now possible to press Ctrl in the Rack Editor to add a cell to the selection, like in Excel
- Ability to hide the extended length as well as their connected turns in the filter menu
- Ability to translate the whole circuit by an offset
- #43925 - New button to zoom-in to the circuit

### Changes

- #44766 - If NEW v27 or more is used, the preference sample period is used instead of frequency for the devices
- #40702 - If NEWv26 or more is used, the preference deviceName is used instead of deviceId for the fire alarm
- #44085 - Warning messages with issues with shapes can now open the search shape dialog with the shapes in question
- Measurers endpoints can be attached to elements regardless of their layer
- #43950 - When closing the rack editor, the asks for confirmation is displayed only if a change has been made
- When drawing a shape in a hidden layer, the user is now acknowledged

### Bug fixes

- #44968 - a false positive in the rack editor "Name already used" error for any entry after deleting and re-adding a column has been fixed

- Fixes related to the undo/redo feature

## ROAD EDITOR 1.35.4

2023-08-31

### Bug fixes

- Fix the display of the itineraries

## ROAD EDITOR 1.35.3

2023-08-03

### Bug fixes

- Apply a proper rotation on the rack when changing the value in its properties

## ROAD EDITOR 1.35.2

2023-08-03

### Bug fixes

- #42173 - Road Editor is not freezing anymore when selecting another load of a cell template on large projects
- An error snackbar is now displayed when the geojson circuit file fails to save

## ROAD EDITOR 1.35.0

2023-07-26

### New features

- #42667 - When drawing a measurer the preview now includes its length
- A warning is now displayed if the user is running low on disk space
- #44454 - Point names can always be displayed thanks to a new button in the filter menu

### Changes

- #44377 - It is now possible to set a custom pallet length value in a cell template



- #44451 - In the xml export of the zones, their points are now sorted in the clockwise direction

### Bug fixes

- Proper error message when a cell template is not defined in a rack while saving
- Do not crash when decreasing the number of pallets in a cell template
- #43918 - When applying the start height to all columns the custom column width was reset
- #44475 - The rack is now properly updated when we update its depth

## ROAD EDITOR 1.34.5

2023-07-10

### Bug fixes

- Make 'Connect all to segments' work again

## ROAD EDITOR 1.34.4

2023-07-06

### Bug fixes

- #44208 - Save the circuit with the first line of the install.xml of the project restored

## ROAD EDITOR 1.34.2

2023-07-05

### New features

- #43849 - Two new naming variables are available in the rack editor: position in cell multi load and position multi load

### Changes

- Large performance improvements due to a rework of the undo (CTRL+Z) feature
- Large performance improvements when updating a rack / stock zone
- #43854 - A new stroke size for segments is available: extra large
- #43857 - When we hover or select an arrow of a segment, only the arrow is highlighted to emphasize the fact we will drag the arrow and not the main line of the segment

- Tooltips have been added to the variables in the rack editor to help the user better understand their meaning
- The edit button of the rack editor has been moved to the left, and the start height is always displayed as it was hard to find for users

### Bug fixes

- /!\ #44079 - Wrong cell height in the racks after level 2, the pick / drop height might be changed

## ROAD EDITOR 1.33.2

2023-06-26

### Bug fixes

- Disable the browser's Google Translate extensions

## ROAD EDITOR 1.33.1

2023-06-26

### Bug fixes

- #43983 - Properly update all the racks where a cell template is used when updating a cell template

## ROAD EDITOR 1.33.0

2023-06-20

### New features

- When selecting or hovering a (or several) shape(s), an outline is now displayed to emphasize the selected shape, this option is enabled by default but can be disabled in the settings

### Changes

- #43540 - At the XML export, the points exported in several layer groups will not be renamed anymore
  - Example: if taxi1 is exported in several layer groups, it was renamed taxi1, taxi2\_2, taxi1\_3, etc. and now it is exported as taxi1 several times (thereby there are several entries with the same name in the stkDB)
- #43586 - The switch button to change the editor mode has been improved
- #43620 - The filters in the search shape dialog are now saved

- #43682 - The size of the segment arrows is now enlarged when choosing the “large” line width in the settings
- #43716 - In the rack editor, the interface to propagate the cell state to the whole selection has been reworked to make it easier to understand to the user

### Bug fixes

- #43555 - In the “Display traffic” tool, the shape is now properly centered on the circuit
- #43680 - The turns start point offset can now be reset to 0
- The displayed preference value is now properly updated in the project settings interface

## ROAD EDITOR 1.32.1

2023-06-12

### Bug fixes

- #43692 - Wrong slot height exported in the xml when the slots underneath were disabled

## ROAD EDITOR 1.32.0

2023-05-30

### Changes

- #43316 - Ensure unicity for slotline names
- #42806 - Alt is now used instead of Ctrl to add the closest segment to the selection and the shape selection has been improved

### Bug fixes

- #43421 - Multiple turns deletion is much faster now
- #43312 - An error popup (false positive) was displayed when two notes had the same text when saving
- #43184 - The lock state was not properly reset when selecting a new points in the point properties toolbox
- A crash was appearing when we were copying/pasting a conveyor or its associated zone
- Naming in rack: the filling character when using letters did not work properly

## ROAD EDITOR 1.31.8

2023-05-15

### Bug fixes

- #43278 - Incorrect heightTable in the stkDB when the start height is not null
- #43241 - Imported layout image have to be imported again
- Crashes when copy/pasting conveyors
- Improvement of the grid in the rack edition view

## ROAD EDITOR 1.31.0

2023-05-03

### New features

- #42334 & #42335 - It is now possible to visualize all the cantons around your mouse
- Move an element parallel or perpendicular to the element to the chosen distance

### Changes

- #42122 - When drawing a turn between an extended length (rack or stock zone segment) and another segment, the layer of the new turn is the one of the segment that is not the extended length regardless of the selected layer given that it is what the user want to do in most cases
- #42122 - Racks and stock zones are now always active (movable and editable) regardless of the selected layer, this change can be disabled in the settings
- #42112 - Disabled cells with no cell template are now allowed
- #42113 - The default extended length is now also available from the rack properties
- #42849 - Docking pattern gabarit added
- The map + circuit png export is now disabled given that it was not working properly and not used, the map + circuit svg export as well as the map png export are still available though

### Bug fixes

- #42797 - Generated turns (line change) were sometimes invalid between an extended length and another segment
- #42903 - Locked points on segments were progressively unsnapped from segments
- #43013 - In the rack naming tool, the start value was not properly used when using the right to left rule
- Fix the hide shape button in the search shape dialog

## ROAD EDITOR 1.30.0

2023-04-18

### New features

- #42333 - it is now possible to visualize the no stop cantons directly in Road Editor
- #42249 - it is now possible to see and choose to which segment a turn is connected

### Changes

- #42110 - Racks, stock zones, measurers, are also movable with special buttons (it was previously available only for segment)
- Rework of the UI to move the shapes with buttons (the distance is now selectable and we can move the shape according to its orientation)

### Bug fixes

- #42072 - points of a segment were not moving when moving the segment with the move segment buttons
- #42206 - turns in other layers were selectable
- A few cases with the undo feature (ctrl+z) are now handled in a better way

## ROAD EDITOR 1.29.2

2023-04-03

### Bug fixes

- #42799 - it was not possible to update the conveyor properties

## ROAD EDITOR 1.29.1

2023-04-03

### Bug fixes

- #42646 - a freeze when trying to rename cells in certain projects

## ROAD EDITOR 1.29.0

2023-04-03

### New features

- #42354 - Given that multiple types point are supported by the SDK from 4.12.4.3, multiples types are exported in the XML if the detected SDK has a satisfying version
- When exporting an XML file, a warning snackbar is displayed if a track element is in the 'Common' layer group

- When exporting an XML file, a warning snackbar is displayed if a slot element is in another layer group than the 'Common' one
- #42244 - Turns between two layer groups are not exported anymore in the XML file, a warning snackbar is displayed to the user
- A badge is displayed next to the filter icon with the number of activated filter to remind the user
- A snackbar is displayed if the user draw an hidden shape, associated tool icons are dimmed

### Changes

- #42120 - There's no selected cell template when opening the rack edition menu now
- #42441 - Display traffic pattern with SDK version higher or equals to 4.12.2

### Bug fixes

- #42126 - The 'Escape' does nothing now when displaying a confirm action to the user
- #42174 - Attached measurers works properly now when the *Snap to 90 degrees option* is enabled
- #42121 - Proper behavior of the gabarits, especially with long segments and the shape gabarit
- #42357 - Initial map opacity of the cursor are now properly set when loading a project

## ROAD EDITOR 1.28.0

2023-03-27

### New features

- New ability to compute itinerary for robots between two points, this feature is included in a new flow configuration tab
- New ability to compute and visualize the trackless turns of a rack
- #41934 - Ability to extend the length of a stock zone (and its scanning area)

### Changes

- Add pictures for the Hyster MC15 robots
- Points exported in several layer groups have a unique name in the XML export now, thereby "PointA" will become "PointA", "PointA\_1", "PointA\_2", etc.

## ROAD EDITOR 1.27.3

2023-03-20

### Bug fixes

- #42384 - Issue with layout image scaling when importing an image

## ROAD EDITOR 1.27.2

2023-03-13

### Bug fixes

- #42242 - A crash when the orientation of a point was filled blank
- #41675 - The name of certain cells were renamed to the default value when updating its cell template

## ROAD EDITOR 1.27.1

2023-03-06

### Bug fixes

- Spelling mistake

## ROAD EDITOR 1.27.0

2023-03-06

### New features

- Load overflows can now be changed per load in addition to per cell template
- A record debug mode has been added in the settings, letting the user the ability to share its screen before a crash

### Changes

- If a major SDK bug is known with the project version, it is displayed in the interface and the user is invited to upgrade his SDK
- The load pattern names are not unique anymore across different cell templates
- When changing the rotation of the racks and the stock zones in their properties, they are now rotated around their center instead of their top left corner

### Bug fixes

- When copying and pasting a point associated with a segment, the point link is now properly defined
- When switching from a project to another one, the lidar navigation map is now properly updated

- Properly export the pallet overflow property

## ROAD EDITOR 1.26.1

2023-02-22

### Bug fixes

- Properly unlink a point from a segment when we delete the associated segment

## ROAD EDITOR 1.26.0

2023-02-21

### New features

- It is now possible to edit the basic Wi-Fi configuration
- Ability to display the zones in the *RobotManager Interface* with an option in *Road Editor*

### Changes

- Better filter menu
- A snackbar is now displayed acknowledging the user when a cell template is not assigned in a rack when exporting the circuit in the XML format
- In the racks position naming interface, the fill character can now be defined (0 was the previous mandatory value)

## ROAD EDITOR 1.25.1

2023-02-13

### Bug fixes

- Properly export the slots when the rack has an angle in the XML circuit file
- Properly display the arrows of the extended length when their length equal zero

## ROAD EDITOR 1.25.0

2023-02-13

### New features

- Gabarits can now be filtered as well as remove all of the at once



- The dynamic taxi strategy preference can now be managed in Road Editor

### Changes

- When exporting a circuit with the *Export Circuit* buttons with a project opened, the name of the circuit is used to name the new file

### Bug fixes

- Locked shapes cannot be moved with the keyboard anymore
- When having a unique centered pallet, the position is now well centered

## ROAD EDITOR 1.24.3

2023-01-30

### Bug fixes

- The extended lengths of disabled cells are now properly created and the cells are well disabled in the xml output

## ROAD EDITOR 1.24.2

2023-01-26

### Bug fixes

- The slots positions were sometimes mixed up in the racks

## ROAD EDITOR 1.24.1

2023-01-24

### Changes

- Number of digits displayed in the rack orientation modified (from 3 to 4)

### Bug fixes

- Rack angle when filling in a float is now working as expected

## ROAD EDITOR 1.24.0

2023-01-24

## New features

- The notes are now available. This tool is made to let users drop information or display texts anywhere they want on the circuit
- It is now possible to fill in a circuit version as well as a circuit description

## Changes

- When importing a layout image made from Map Editor with a *Ouster* lidar laser, the layout image is automatically scaled
- A sha1 hash is now included in the circuit xml file

## Bug fixes

- Fix of a crash that occurred when transferring a rack without extended lengths to another layer
- Fix of a wrong distance applied when scaling a layout image

# ROAD EDITOR 1.23.1

2023-01-18

## Bug fixes

- Fix a major bug with the display of the stock zones when the slot size was not of the dimension of a EURO pallet

# ROAD EDITOR 1.23.0

2023-01-09

- The conveyors are now available in Road Editor, this new object is a rack with only one cell associated with a zone. Furthermore, devices can be associated to this conveyor to define a check made by the robot before picking or dropping in the conveyor.
- A new button is now available in the point properties to choose to which close segments the point needs to be snapped. It can be particularly useful with rack aisles.
- The zones and the points can now be imported from a legacy XML circuit. Bug fixes related to this import have also been added.
- A new button to enable/disable the “highlight turns” feature has been added in the filter menu
- It is now possible to compute easily the number of loads available in a selection of shapes (racks, stock zones, conveyors). The number of loads is now also displayed in the rack edition view as well as the stock zone edition view.
- When having a single turn in the clipboard and selected only turns, a new option “Paste turn parameters” is now available in the context menu

## ROAD EDITOR 1.22.0

2022-12-19

- Rework of the UX of the layout image (ability to rescale, to drag it, to be way more precise, etc.)
- Zones with the door option can now be linked to devices (in normal mode only)
- Ability to hide and change the opacity of the obstacle lidar map
- Obstacle lidar maps are now saved in the circuit
- New cell template parameter: beam distance to rack front, especially used with IPN beams
- The orientation of the measurers can now be set manually
- Support of the Opera and Microsoft Edge browsers
- Major bug fix with the export of the racks in the XML circuit
- Various minor bug fixes, various minor UX improvements

## ROAD EDITOR 1.21.0

2022-12-05

- A "lock orientation" tool is now available, it lets the user resize a segment or a measurer without moving it
- The measurers are now extendable to act like a reference line (formerly guide in Circuit Editor)
- It is now possible to import a robot log and display its trajectory on the playground to help the user to design the circuit
- The orientation of the segment is now displayed and editable in its properties
- The names of the racks and stock zones are now displayed on the playground
- It is now possible to create a turn between two locked segments
- We can now export a draft of the circuit in our SynaOS partner format
- Some turns are now imported when importing a legacy circuit (xml format)
- Bug fix in the saving of the zones
- Other various minor bug fixes

## ROAD EDITOR 1.20.0

2022-11-21

- New "highlight turns" mode to emphasize the turns, press 'H' to enable or disable this mode
- Rearrange the layout (button positions, etc.)
- The gabarit of the robots can now be displayed for points as well

- Ability to disable the device management in Road Editor
- Manage the maximum height preference in Road Editor
- Ability to see the angle of the segments as well as the measurers
- Buttons to unselect all layers and shape types in the search shapes menu
- New default values for certain perceptions parameters during the export
- Bug fix regarding the start height of the racks that is doubled (1.19.2)
- Bug fix in the display of the release note (1.19.1)

## ROAD EDITOR 1.19.0

2022-11-07

- New variables were added for the custom naming of the positions in the racks (column, position in cell, position, level, load pattern, rack name)
- When having cells with multi-loads (mixpallet), it is now possible to apply the rule to all the loads of the cells
- Import of the devices from the project preferences when opening a project
- The release notes are available in the application
- Technical improvement of the segments in front of the stock zones
- Various minor bug fixes

## ROAD EDITOR 1.18.0

2022-10-21

- New project settings dialog displaying some data about the project
- Ability to change and see the Supervisor IP address, the communication mode used by the robots, as well as the robot language in the project settings
- Press 'C' to recenter the map
- When copying a rack between projects, its cell templates are now automatically imported
- Custom naming for the rack positions was introduced
- Various minor improvements

## PRIOR THESE VERSIONS

No release notes are available, please contact us if you have any questions.

