

Release Notes

Last modified: 2021-12-02

<https://www.ptvgroup.com/en/support-vissim>
<https://www.ptvgroup.com/en/support-viswalk>

2022.00-02 [237243]

2021-12-02

New Features and Changes

DriverModel.DLL Interface

- The handling of user defined attributes is faster now. ([16734](#))

Signal Control

RBC:

When converting old RBC signal controllers, their detector record configuration is preserved if possible. ([16768](#))

Viswalk

- Fire Events now support .q-files that were created with FDS starting from version 6.7.6 and which are no longer required to contain leading zeros in the file name. ([16667](#))

Fixed Bugs

Data Model

- The default network was changed, so that the driving behavior attribute "Minimum longitudinal speed for lateral movement" now has a value of 1.0 km/h instead of 3.6 km/h for all driving behaviors when creating a new network. ([16856](#))

Formulas

- Converting strings to numbers with the function StrToInt previously ignored decimals when the decimal separator was different from a point in the system settings. Now, the function only accepts digits and a dot as a decimal separator as input. Spaces at the beginning and the end of the string, as well as other non-numeric characters (except +, -, e/E), are invalid. Invalid inputs are interpreted as an error and result in an empty value. Before, it was possible that invalid parts of the input were silently discarded. ([16766](#)

Graphics

- A wrongly configured color scheme in the graphics parameters of nodes can no longer cause a crash at the start of the simulation. ([16858](#))
- Background graphics in the DWG file format cannot cause crashes anymore. ([16713](#))

Network Editor

- It is again possible to change the length of pavement markings of the type "Zebra crossing" via dragging in the network editor. ([16760](#))

Public Transport

- Vissim no longer crashes when a pedestrian enters an area which is configured both as a waiting area for public transport and as a queue. ([16747](#))

Signal Control

RBC:

When the name of a row with drop-down lists (f.e. 'Called SGs') is clicked, this no longer leads to the selection of all cells and that the first drop-down list is opened; this prevents accidental changes of all values in the row. (469)
An issue was fixed regarding signal groups, that can be switched on outside of their permissive period. This only happens in situations with more than two signal groups in one ring barrier group. (567)
An error message is now issued in a special case, where the walk time of a pedestrian group is too long, so that it can never be switched on. This situation previously was not detected in all cases. This only happens, if there are different red clearances in a barrier group. (575) **(16861 !)**

User-Defined Attributes

- The assignment of values to user-defined attributes of the network settings is faster now. **(16435)**

Vehicle Simulation

- On conflict areas for merging conflicts with an additional stop distance, vehicles in the major flow see other vehicles of the minor flow at the correct position, even if the other vehicle is on a different link than the conflict area. **(14481 !)**

Viswalk

- Areas that are entered by Pedestrians directly after leaving an elevator can now be cut by obstacles into multiple pieces. This no longer prevents the start of the simulation. **(16015 !)**

Breaking Changes

Formulas

- Formulas containing the function StrToNum now lead to different results when they are applied to strings that are now invalid. **(16766 ✓)**

Signal Control

- RBC:
RBC controllers with more than two signal groups in a ring barrier group can behave differently. **(16861 ✓)**

Vehicle Simulation

- Networks with merging or branching conflict areas can lead to different results compared with previous versions. **(14481 ✓)**

Viswalk

- Known problem: Formula routes using aggregated attributes over pedestrians on an area can cause a crash during a simulation run using multiple cores. It is recommended to run such networks only with 1 core. **(13455 ✓)**
- Minor changes to the pedestrian behavior when leaving an elevator are possible. In rare cases, the pedestrian route choice can be different in networks containing elevator groups with multiple elevators or elevators with multiple doors. **(16015 ✓)**

2022.00-01 [236021]

2021-11-03

New Features and Changes

ANM Import

- The ANM import from Visum now assigns the meso penalty for merging vehicles to nodes. **(15957)**

Graphics

- Active PT line stops now include an arrow showing the driving direction of the PT vehicle. In addition, active line stops with direction change are drawn with a different color which can be set by the new graphics parameter "Active direction-change-stop color" for vehicle routes and PT lines. **(16418)**

- + Signal heads can now be hidden in 3D mode while still being visible in 2D mode outside the simulation (during simulation in 2D they are always visible). Therefore a new option "invisible" was added to the signal head graphics parameter "signal head display mode 3D".
This setting does not affect 3D traffic signals. (16396)
- + The 3D mode now uses Anti-Aliasing by default. (16641)

Installation

- + If Vissim 2021 is installed on the computer, a setup (or update) of Vissim 2022 tries to copy the old rbc_controller.dll from the old installation directory to the new one. (16696)
- + The CodeMeter Runtime deployed with PTV Vissim has been updated to CodeMeter 7.30a. (16702)

Signal Control

- + The setup package of the controller Econolite ASC/3 has been updated to version 1.5.1.6. (16755)

Vehicle Simulation

- + The vehicle behavior was improved when lane changes, overtaking on the same lane and the observation of adjacent lanes occur simultaneously. Thus, vehicles now block each other less frequently during lane changes. (16662 !)

Viswalk

- + The new attribute 'PTBoardPassChoice' for PT waiting areas with multiple PT stops allows to select if pedestrians only choose a PT line or a PT line and a fixed PT stop. (16527 !)

Fixed Bugs

Driving Simulator Interface

-  Simulator vehicles can now find links on levels with a non-zero z-coordinate. (16681)

File Handling

-  Doors of a 2D/3D Model Segment are now deleted when changing the 3D model file to a new file without door information. (16589)
-  Loading a network which contains references to files on network shares that are not available cannot cause a crash anymore. (16583)

Lists

-  The column widths of coupled lists are adapted automatically once as soon as content is shown (except the layout was read from a layout file or at least one column width was set manually). (16561)

Network Editor

-  Block signals can now be added without the definition of a signal control. (8239)

Signal Control

RBC:

There now is an attribute called 'Lead', which affects the order of the signal groups in the sequence.
In certain cases, signal groups are now switched on outside of their permissive period. This reproduces a behavior of the old RBC controller.

An issue in the transition was fixed, which could lead to crashes.

An issue was fixed in relation to the Ped Recall flag on coordinated controllers.

An issue was fixed on coordinated controllers, where signal groups sometimes were wrongly switched on when there was no call.

RBC (old):

Controllers with explicit force-offs can now be simulated correctly again. (16716 !)

-  The user interface for RBC controllers no longer clears values in selected cells during the import of a file. (16278)

Vehicle Simulation

-  The diffusion of vehicles could cause non-deterministic behavior in rare cases, either if platooning was enabled or if a simulation used dynamic assignment. The problem was fixed. (14041 !)

Workspace

✓ New lists are now opened in the last active list window. (16315)

⚠️ Breaking Changes

Signal Control

❗ RBC:
Coordinated controllers may behave differently. (16716 ✓)

Vehicle Simulation

- ❗ Simulation results might differ compared with previous versions if vehicles drive side by side on the same lane (or drove into each other) and want to change lanes. (16662 +)
- ❗ Simulation results might differ in rare cases compared with previous versions, either if more than one vehicle diffuses in the same time step during dynamic assignment, or if a vehicle approaches another diffusing vehicle to form a platoon. (14041 ✓)

Viswalk

❗ For networks with PT waiting areas with multiple PT stops, simulation results can differ from those of previous versions. In previous versions, PT stops of a waiting area were chosen with an equal probability. Now, all boarding volumes are considered equally, and their relative volumes are used to distribute boarding passengers. (16527 +)

2022.00-00 [234335]

2021-09-24

⊕ New Features and Changes

COM Interface

- ⊕ Every collection has the new method AttrExists() to check if the objects in the collection have a specific attribute (optionally with subattributes). (14601)
- ⊕ Python 2.7 isn't supported anymore for event-based scripts but only Python 3.9. (15964 !)
- ⊕ The container IAttributes (containing the attributes of the object type inside a container) has the method ItemByKey now to access an attribute object through its attribute ID. (16410)

Data Model

- ⊕ Attribute modifications accept only object types which have at least one attribute which can be modified during a simulation run. (15329 !)

Driving Simulator Interface

- ⊕ This interface has changed. See the specific documentation. (15843 !)

Evaluations

- ⊕ New add-on module "Bosch Emissions". See the document "Vissim 2022 - what's new.pdf" for details. (15762)
- ⊕ The writing of evaluation data to the evaluation database at the end of a simulation run can be cancelled now. In this case, the evaluation data of this run in memory (visible in lists) is also deleted. (15440)

File Handling

- ⊕ UTF-32 encoded text files are not supported anymore. (15726 !)

Graphics

- ⊕ *.pdf files can now be used as background image objects. (3785)
- ⊕ In 3D mode, when a new camera position is selected manually (including changing into or out of cockpit mode), a short camera movement is now shown. (7816)
- ⊕ New window type "Scatter plot". See the document "Vissim 2022 - what's new.pdf" for details. (12693)

Lists

- + If a list column contains empty cells, it can now also be filtered by "empty" or "not empty". (15605)
- + The drop-down list for the attribute "Distribution" of attribute decisions and attribute modifications have the option "Add" now to create a new free distribution. (16558)

Network Editor

- + Geolocation search. See the document "Vissim 2022 - what's new.pdf" for details. (9225)
- + The movement direction which is affected by stop signs, signal heads and priority rule stop lines is now indicated by a small arrow pointing from upstream to the selected network object. (15862)
- + User-Defined Web Map Services: See the document "Vissim 2022 - what's new.pdf" for details. (8077)

Presentation

- + Keyframes have the new attribute "Camera movement (3D)" to select from two possible tracks to the camera position of the next keyframe: "Direct line" uses linear interpolation for both camera position and view angle, moving the camera on a straight line, "Track view point" uses linear interpolation of the view point (= intersection of the mid-camera ray with land level of the network) and moves and rotates the camera accordingly (so the camera is moved on an arc between the two camera positions and keeps focus on the view point track). (15753 !)
- + Video recording doesn't use the codecs installed in Windows anymore but always the free library ffmpeg. See the document "Vissim 2022 - what's new.pdf" for details. In the COM interface, the IPresentation attribute "RecordAVIs" has been renamed to "RecordVideos". (7819)

Reversing at PT stops

- + A PT vehicle departing from a PT stop can be "beamed" to an overlapping link in reverse direction thus enabling shuttle services like people movers or reversing trains in terminus stations. Reversing links (or even link sequences) can be generated by the new context menu command "Create Reverse Direction for all Links". The new attribute "Change of driving direction" in a PT line stop triggers the reversing.
See the document "Vissim 2022 - what's new.pdf" for details. (338)

Scenario Management

- + Modifications have two new Attributes: "Scenarios" lists all scenarios containing this modification explicitly, and "Scenarios (complete)" lists all scenarios containing this modification explicitly or containing a modification which depends on this modification. (16178)

Signal Control

- + The old rbc_controller.dll built by a third party has been replaced by rbc_controller_ptv.dll. See the document "Vissim 2022 - what's new.pdf" for details. (16519)

Simulation

- + More options for attribute decisions and attribute modifications. See the document "Vissim 2022 - what's new.pdf" for details. (16048 !)

Viswalk

- + Adding a route location to multiple selected pedestrian routes at once is now possible. See the document "Vissim 2022 - what's new.pdf" for details. (15528)
- + For the calculation of the distribution of alighting passengers over the doors of a PT vehicle, parts of the vehicle not containing any passengers can be specified now. See the document "Vissim 2022 - what's new.pdf" for details. (14439)
- + Formula-based PT line selection. See the document "Vissim 2022 - what's new.pdf" for details. (5949)
- + New area attribute "Distance to PT waiting position distribution". This references the distance distribution from which the distance is drawn between the position where a pedestrian enters the waiting area and their waiting position. See the document "Vissim 2022 - what's new.pdf" for details. (15522)
- + Straight Stairs With Multiple Landings. See the document "Vissim 2022 - what's new.pdf" for details. (14325)
- + The file format Ifc4 is supported now. (11490)

Workspace

- + GUI improvements for High-DPI screens. (14579)

- + Improved user interface in the dialogs for functions and distributions and in the list of distributions. (13445)
- + Tooltips for full path and filename for the files in the most recently used list in the "File" menu. (16540)

! Breaking Changes

COM Interface

- ! Python 2.7 isn't supported anymore for event-based scripts but only Python 3.9. (15964 ⓘ)
- ! The property "Category" at IAttribute begins with a capital C now. (16286)

Data Model

- ! Attribute modifications accept only object types which have at least one attribute which can be modified during a simulation run. (15329 ⓘ)
- ! Some attributes of attribute decisions and attribute modifications have been renamed. See the document "Vissim 2022 - what's new.pdf" for details. (16048 ⓘ)
- ! The enum type "CameraMovement" has been renamed to "CameraTransitionType". (15753 ⓘ)

Driving Simulator Interface

- ! This interface has changed. See the specific documentation. (15843 ⓘ)

Evaluations

- ! Vehicle delay results can differ from previous versions. (16582)

File Handling

- ! UTF-32 encoded text files are not supported anymore. (15726)

Simulation

- ! Results differ from those of previous versions due to a completely new random number generator. (15773)

Vehicle Simulation

- ! Networks with vehicles unparking backwards using driving parameters with changed values for minimum look ahead or minimum look back distance can have different results compared with previous versions. (16539)
- ! Simulation runs with platoons widening can have different results compared with previous versions. (16576)

Viswalk

- ! Results can differ from those of previous versions due to a new geometric calculation of the walkable ground. (15485)