PTV Vissim & Viswalk 2024
Release Notes

PTV | GROUP

Last modified: 2024-05-27

2024.00-07   [280218]

2024-05-24

⊕ New Features and Changes

3D Models

⊕ Ambulances are now included in the model library that comes with your Vissim version at "Van - Ambulance ..." (both an international and a German version). They include flashing flashlights as an animation. **(230216)**

Security updates

⊕ .Net Framework: The .Net Framework will only be included in the installation if the used Windows version does not provide an appropriate .Net Framework. This is typically the case for older Windows Server versions. In that case, the updated .Net Framework version 4.8 will be installed. **(191938)**

⊕ Update of 'expat': The software component 'expat' has been updated to version 2.6.2. **(228403)**

⊕ Update of 'minizip': The software component 'minizip' has been updated. **(230685)**

Signal Control

⊕ The 'Econolite EOS' controller is now available in Vissim by selecting the respective signal controller type. **(226607)**

✓ Fixed Bugs

Data Model

✓ A performance regression in the automatic computation of curve radii of link points in specific networks was fixed to prevent delays when loading or editing networks or starting the simulation. **(230537 🛑)**

Evaluations

✓ A workaround has been implemented in the Bosch emissions calculation to bypass a temporary problem with the cloud connection. Too many vehicles can still lead to problems. **(233090)**

Graphics

✓ For predefined color schemes where 'white' color was defined for the largest class although it did not fit with the other colors, 'white' was now removed from their palette. **(219216)**

Network Editor

✓ A warning is now displayed when loading a network with objects located at extremely large coordinates, as this can lead to drawing errors. **(214290)**

Scenario Management

✓ The evaluation output directory is no longer set automatically to the folder of the network file (*.inpx) when editing the evaluation configuration, in case the base network or a modification is loaded. This prevents different scenarios from writing evaluation output to the same directory. **(213035)**

✓ Vissim no longer crashes in specific cases where warnings occurred while loading a scenario with evaluation results. **(207129)**

Signal Control

✓ Specific warning messages from signal controllers had their formatting fixed and are again readable. **(229538)**

Simulation

- ✅ Displaying labels of network objects such as signal heads in the network editor no longer decreases the simulation performance significantly. **(226387)**

Vehicle Simulation

- ✅ The simulation no longer crashes in specific networks with parking lots that allow reversing in or out. **(228373)**
- ✅ Vehicles approaching a signalized pedestrian crossing now assume an approaching pedestrian will stop at red signals instead of decelerating until the pedestrian actually stopped. **(222941 ⚠)**
- ✅ Vehicles with right of way at a crossing conflict area will now yield instead of colliding with a conflicting vehicle, in case the conflicting vehicle is unable to stop before the conflict area. **(229637 ⚠)**
- ✅ Vehicles with right of way at a merging conflict area will now yield instead of colliding with a conflicting vehicle, in case the conflicting vehicle is unable to stop before the conflict area. **(221757 ⚠)**

Viswalk

- ✅ The simulation no longer crashes if at least one area is used as a waiting area for a PT stop, but no area exists that is used as a platform edge for this PT stop. **(222523)**

Workspace

- ✅ A Smart Map window or Network Editor window using the option "Auto Hide" no longer causes Vissim to crash. **(233097)**

⚠ Breaking Changes

Data Model

- ⚠ In all networks that have links points with the attribute 'Radius source' set to 'Calculated' the value of the attribute 'Radius' may change. If this change is undesired, please set the 'Radius source' to 'User input' before opening the network with this new Service Pack Version. **(230537 ✅)**

Vehicle Simulation

- ⚠ In network containing crossing conflict areas, simulation results can differ to those of previous versions. **(229637 ✅)**
- ⚠ In network containing merging conflict areas, simulation results can differ to those of previous versions. **(221757 ✅)**
- ⚠ In networks containing vehicles and pedestrians, the vehicle behavior at signalized pedestrian crossings can change. This causes evaluation results to differ from those of previous versions. **(222941 ✅)**

2024.00-06 [277807]   2024-04-11

⊕ New Features and Changes

Cloud

- ⊕ The Data Transfer Tool can now be installed for all Windows users by an administrator. **(198681)**

Driving Simulator Interface

- ⊕ If the "Automotive" license module is available, the driving simulator interface now allows to run multiple simulations in parallel. In that case, the new "DrivingSimulatorProxy.dll" contained in this service pack must be used. Without the "Automotive" license module, the previous version of the "DrivingSimulatorProxy.dll" remains compatible and may still be used. **(225660)**

Signal Control

- ⊕ External: The new vehicle attribute 'Priority', which may also be edited during simulation, will be transmitted to external signal controllers requesting vehicle to infrastructure data (V2I) using the identifier SC_DLL_DATA_V2I_VEH_PRIO. **(213989)**

Viswalk

⊕ The computation of potentials is now much more performant, especially if the potential covers large areas. **(198737)**

✓ Fixed Bugs

ANM Import

✓ The automatically computed emergency stop position of channelized turns or outer lane turns is no longer too far upstream of the turn. This caused vehicles to stop at the emergency stop position before the lane of the respective turn existed. **(213839)**

COM Interface

✓ A problem was fixed that prevented the program from being closed successfully via the COM Interface. **(226832)**

✓ A simulation can again be started from a manually executed script if the simulation is not already running. **(222011)**

Cloud

✓ The dialog for the update or installation notification of the Data Transfer Tool will not be displayed again immediately after closing the dialog. **(225946)**

Data Model

✓ If links or lanes are only slightly curved, but sill wide enough to drive straight on them, no curve radii will be assigned to link points at these locations anymore when automatically calculating curve radii. **(222741 ❗)**

✓ The automatic computation of the attribute 'Radius' of link points has been improved. In case only the width of a lane changes, no values will be computed anymore to prevent vehicles from braking in specific situations, e.g., next to dedicated left or right turn lanes at intersections. **(205380 ❗)**

File Handling

✓ After performing a 'Save as...' with copying over previous evaluation results, removing a simulation run will now remove the simulation run from the copied results instead of removing it from the original results. **(211213)**

Graphics

✓ In 3D mode, background maps are now displayed correctly for user defined map providers, regardless of the color depth of the images returned by the map provider. **(220597)**

✓ Several minor issues have been fixed when converting 3D models referencing legacy files to the new 3D models files delivered with Vissim. **(219531)**

✓ The animation speed of pedestrians walking on moving walkways and escalators again matches their walking speed. In addition, standing pedestrians do not hover above moving walkways or escalators anymore. **(220635)**

Network Editor

✓ Activated color schemes for links no longer slow down the simulation speed in quick mode. **(220175)**

✓ Labels of specific objects, e.g., managed lane routes, are no longer displayed twice during a simulation. **(219322)**

✓ Meso network nodes can now be created automatically without errors within segment nodes, that are only used for evaluation or dynamic assignment. **(214519)**

✓ The grid of the network editor is no longer enabled automatically when switching on background maps in the network editor. **(198788)**

✓ Vissim no longer causes "unhandled exception" when editing the graphic parameters of links. **(218677)**

Signal Control

✓ Fixed Time: A signal group that is irrelevant in all stages, does not prevent the simulation from starting anymore. **(195538)**

Vehicle Simulation

✓ The value of the 'Speed difference' attribute of vehicles no longer shows a non-zero value for parked vehicles or vehicles waiting at stop signs or in PT stops. **(158473)**

✓ Vehicles no longer choose to parking routes with parking spaces that are only a tiny bit longer than the vehicle length, i.e., a few centimeters. Previously, these vehicles failed to park successfully and got stuck at the parking space forever. **(219414 ❗)**

Viswalk

- In specific situations, pedestrians are no longer teleported to the queue head if they reach the first position in a queue, but have not yet reached the queue head. In addition, they also do not start walking again with unrealistic high speeds after having waited only a single time step at the queue head. This also affects pedestrians waiting for other pedestrians to alight from elevators or PT vehicles. **(226931 ⚠)**
- The BIM Import (*.ifc) no longer crashes if the file contains invalid area data, where the area has zero extent. **(218390)**

⚠ Breaking Changes

Data Model

- In all networks that have links points with the attribute 'Radius source' set to 'Calculated' the value of the attribute 'Radius' may change. If this change is undesired, please set the 'Radius source' to 'User input' before opening the network with this new Service Pack Version. **(222741 ✓)**
- In all networks that have links points with the attribute 'Radius source' set to 'Calculated' the value of the attribute 'Radius' may change. If this change is undesired, please set the 'Radius source' to 'User input' before opening the network with this new Service Pack version. **(205380 ✓)**

Vehicle Simulation

- In networks with vehicle models that have nearly the same length as parking spaces in that model, vehicles may choose other parking spaces. This may cause simulation results to differ from previous versions. **(219414 ✓)**

Viswalk

- In networks containing queues, elevators or PT stops, simulation results can differ to those of previous versions. **(226931 ✓)**

2024.00-05 [275319]

2024-02-26

⊕ New Features and Changes

Graphics

- ⊕ 3D models are now displayed in more detail at large distances and do not appear out of nowhere when zooming towards them. For recordings, 3D models are always displayed in full detail, regardless of the distance from the camera. **(157336)**

Installation

- ⊕ Python update: The included Python installation has been updated from version 3.11.4 to 3.11.8. The Python package certifi has also been updated to version 2024.2.2. **(201599)**

✓ Fixed Bugs

- Startup accelerated: The program startup has been accelerated slightly. **(215337)**

Meso Simulation

- Meso vehicles that chose a new path at a dynamic routing decision and cannot reach their next meso turn along the path because they are on the wrong meso lane leading to the node with the branch now cause a warning and will be deleted from the network instead of getting stuck on arbitrary turns or causing crashes. **(211045 ⚠)**

Network Editor

- Vehicles and pedestrians are again correctly displayed on semi-transparent background maps. **(217439)**

Vehicle Simulation

- Vehicles no longer stop needlessly at pedestrian conflict areas with pedestrians having right-of-way, if the pedestrians are waiting at a red signal. **(217447 ⚠)**
- Vehicles now better judge if another vehicle will come to a stop in order to avoid having to stop inside crossing conflict areas where blocking should be avoided. **(211015 ⚠)**

- ✅ Vehicles trying to overtake on the same lane now also consider the lateral position of their leading vehicle's rear end to avoid crashes. **(215463 🔴)**
- ✅ Vissim no longer crashes when a vehicle drives over a short connector with the same from-link and to-link, and then onto another link in the same time step. **(214806)**

Viswalk

- ✅ A route location on an elevator waiting area followed by a route location on a ramp or stair no longer causes an internal error at simulation start. **(216561)**

🔴 Breaking Changes

Meso Simulation

- 🔴 Simulation results in networks with simulation mode Meso and dyanmic routing decisions can differ to those of previous versions. **(211045 ✅)**

Vehicle Simulation

- 🔴 In all networks the vehicle behavior at crossing conflict areas may change, resulting in different simulation results when compared to previous versions. **(211015 ✅)**
- 🔴 In networks containing signalized pedestrian crosswalks, where pedestrians have right-of-way at the conflict areas, simulation results may differ to those of previous versions. **(217447 ✅)**
- 🔴 In networks where overtaking on the same lane is enabled, simulation results can differ to those of previous versions. **(215463 ✅)**

2024.00-04 [272727]

2024-01-11

⊕ New Features and Changes

Viswalk

- ⊕ To prevent pedestrians that try to board an elevator cabin from blocking a door indefinitely, the attribute 'Maximum pedestrian door blocking time' was added to elevator groups. When this time is up, pedestrians blocking elevator doors while boarding the cabin will choose another elevator of the group or return to the waiting area. **(158235)**

✅ Fixed Bugs

Network Editor

- ✅ The arrows of the controls for the action "Create car park" again point in the correct direction. **(218052)**

Viswalk

- ✅ Pedestrians no longer ignore priority rules in certain situations. **(211257 🔴)**

🔴 Breaking Changes

Viswalk

- 🔴 In networks containing priority rules and conflict markers on links that are pedestrian areas, simulation results can differ to those of previous versions. **(211257 ✅)**

2024.00-03 [271760]

2023-12-15

⊕ New Features and Changes

Cloud

- ⊕ Improved error messages: For example, if there are errors while trying to save a cloud model, e.g. because the Revision was deleted, on which the change to be saved is based on, usefull error messages are now displayed. **(203810)**

Network Editor

- ⊕ Elevation data for links can now be imported from GeoTIFF data sources. **(166291)**

Vehicle Simulation

- ⊕ Vissim now supports 2D/3D model segments with only one axle by setting the position of the front and rear axle of a segment to the exact same value. This enables modeling of trailers and tram segments with one axle. **(158373)**

Vissim Kernel

- ⊕ The DriverModel interface is now available for the Vissim Kernel on Linux operating systems. **(194797)**

✅ Fixed Bugs

Miscellaneous

- ✅ Https communication via proxy failed: In some cases, network access via https failed with the message 'Nschannel: next InitializeSecurityContext failed: Unknown error (0x80092012) - The revocation function was unable to check revocation for the certificate', mostly in connection with the use of a proxy. This error has been fixed. **(198743)**

Signal Control

- ✅ RBC: Since the new RBC controller does not support the 'OffsetReference' mode 'LagCoordGreen', this mode is now changed to 'LeadingStartOfGreen' automatically upon import, instead of yielding an unknown 'OffsetReference' mode. **(209416)**

Vehicle Simulation

- ✅ The interaction of vehicles at merging conflicts was improved to avoid vehicles crashing into each other in a rare scenario. **(207833 ❗)**
- ✅ Train or tram segments no longer jitter or jerk in curves, especially when the front joint and front axle of a segment are not located at the same position along the 2D/3D model segment. **(158001 ❗)**
- ✅ Vehicles approaching a blocked conflict area now brake more evenly, allowing conflicting vehicles to better recognize that they will stop in front of the conflict area. **(209219 ❗)**

Vissim Kernel

- ✅ Relative file paths from the command line are again resolved correctly. **(202581)**

❗ Breaking Changes

Vehicle Simulation

- ❗ Simulation results may differ to those of previous versions in specific cases due to changed vehicle behavior at merging conflict areas. **(207833 ✅)**
- ❗ Simulation results of networks with crossing conflict areas can differ to those of previous versions. **(209219 ✅)**
- ❗ Simulation results with trains and trams might differ from those of previous versions due to the improved method for calculating the positions of the train segments. This might affect other vehicles if observe adjacent lanes is enabled in the driving behavior. Moreover, the door locations might change slightly, causing boarding and alighting pedestrians to move differently. **(158001 ✅)**

2024.00-02 [269248]   2023-10-25

⊕ New Features and Changes

Signal Control

- ⊕ RBC: Omitted vehicle signal groups are not visualized in the sequence diagram of the RBC editor anymore. **(192978)**

Vehicle Simulation

⊕ Improved parallel computation of the vehicle simulation further reduces the runtime of the simulation on average by about 40%. Please note that the improvements vary considerably depending on the simulated network. **(158151)**

✅ Fixed Bugs

Network Editor

✅ Multiresolution seamless image databases (MrSID, *.sid files) containing transparency information can now be displayed as background images. **(192820)**

Viswalk

✅ Pedestrians intending to stand or walk on either the left or the right side of an escalator or moving walkway again approach their chosen side while walking on the landing platforms. **(198738 ⛔)**

✅ Pedestrians no longer ignore signal heads or priority rules on pedestrian links that are cut by obstacles into multiple pieces. Signal heads or priority rules must not be covered completely by obstacles. In case signal heads or priority rules on pedestrian links are cut by obstacles into multiple pieces themselves, all pieces must be located on the same connected region of walkable ground. **(157058 ⛔)**

✅ Pedestrians yielding at conflict areas with avoid blocking the major flow enabled now use the attribute 'Minimum gap blocking (default)' instead of 'Rear gap (default)' to determine if they may enter a conflict area before an approaching vehicle. In addition, the attribute 'Rear gap (default)' now defines the minimum time gap in seconds between a yielding pedestrian leaving the conflict area and the front end of a vehicle entering the conflict area. **(157529 ⛔)**

✅ The value of the pedestrian attribute 'remaining distance' of queuing pedestrians now shows the distance to the queue head instead of the distance to the last pedestrian in the queue. **(157714 ⛔)**

✅ Yielding pedestrians at conflict areas with additional stop distance now better judge the time they need to cross the conflict area, allowing them in more situations to cross the conflict area. **(157531 ⛔)**

⛔ Breaking Changes

Viswalk

⛔ In networks containing conflict areas with an additional stop distance where pedestrians yield, simulation results differ to those of previous versions. **(157531 ✅)**

⛔ In networks containing conflict areas with yielding pedestrians that are allowed to block the major flow, simulation results can differ to those of previous versions. The old behavior may be restored by setting the value of 'Minimum gap blocking (default)' to the value of 'Rear gap (default)' and then setting the latter to zero seconds. **(157529 ✅)**

⛔ In networks containing pedestrian links with signal heads or priority rules that are cut by obstacles, simulation results can differ to those of previous versions. **(157058 ✅)**

⛔ Simulation results of networks containing escalators or moving walkways with standing location either left or right can differ to those of previous versions. **(198738 ✅)**

⛔ The results for the attribute 'flow towards destination (average)' of the pedestrian network performance evaluation can differ to those of previous versions. **(157714 ✅)**

2024.00-01 [267606]   2023-09-21

⊕ New Features and Changes

3D Vehicle Models

⊕ Over 40 new vehicle models of various types (including car, SUV, van, bus, HGV, motorbike, scooter) of recent model years and various world regions were added to the library of Vissim models, including vehicles with hybrid and electric propulsion. Also the standard vehicle models used in 'defaultx.inpx' were updated. **(159125 | 17933)**

Data Model

⊕ The new data type 'Color' is available for user defined attributes. Editing the attribute opens the color dialog known from the graphics parameters. In addition to the ARGB values of the color, a box filled with the color will be shown in lists. See the document "Vissim 2024 - What's new.pdf" for details. **(158317 | 15458)**

DriverModel.DLL Interface

⊕ The Visul Studio solution for the DriverModel API example in the Vissim installation has been updated. **(188058)**

Formulas

⊕ A new function 'Color(a, r, g, b)' has been introduced to determine the color value from separate values for alpha, red, green, and blue. The separate values are expected to be integers in the range from 0 to 255. **(168018)**

Vehicle Simulation

⊕ Vehicles are now able to perform zipper merging in merge or lane end situations. This behavior is enabled by default in newly created networks. For already existing networks, it can be configured in the driving behavior dialog in the lane change tab. See the document "Vissim 2024 - What's new.pdf" for details. **(166678)**

Vissim Kernel

⊕ Networks with signal controllers of type "Fixed Time" can now be simulated using Vissim Kernel running on Linux operating system. See the document "Vissim 2024 - What's new.pdf" for details. **(168286)**

✅ Fixed Bugs

Dialogs

✅ The dialogs "Link" and "Generate Spline" are now properly displayed on high resolution displays with a large scaling factor. **(179578)**

Driving Simulator Interface

✅ The motion state of pedestrians, that are controlled via the driving simulator interface, is now correctly determined while crossing ramps. **(186520)**

File Handling

✅ Vissim is again able to import matrices exported by Visum. **(187291)**

Meso Simulation

✅ Vehicles entering a micro section perform an improved lane choice to avoid congestion. **(189204 🔴)**

Scenario Management

✅ Upon loading a scenario or loading modifications into a network, conflict areas are now properly updated. Simulating a scenario and simulating an exported scenario yield the same results now. **(188284 🔴)**

Signal Control

✅ Controllers of types '2-Stage Controller', 'Pedestrian Crossing' and 'Railway Crossing' no longer incorrectly report a cycle time, since they have none. **(187800)**

✅ Fixed Time: The cycle second is now also reported correctly while no signal program is active in the daily signal program list. **(184121)**

✅ Fixed Time: the initial cycle second is now computed correctly in case the simulation start time of the simulation is not midnight and daily signal program lists are used. **(184115 🔴)**

✅ RBC: The signal sequence generated by RBC is no longer validated by Vissim since not all checks applied to RBC. This avoids incorrect warnings at simulation start. **(187916)**

✅ The value of the attribute 'tSigState' of signal groups is now computed consistently for all signal controller types and also updated each simulation time step, and not only each signal controller time step. **(187798)**

Vehicle Simulation

✅ In specific cases, vehicles at a crossing conflict incorrectly treated the conflict as a branching or merging conflict. This has been fixed. **(188281 🔴)**

Viswalk

✅ Area measurements with sections that have an additional level and which contain a PT stop will no longer consider alighting pedestrians. Sections with an additional level should only consider pedestrians on ramps that connect the two levels of the section. **(157658 🔴)**

- Detectors and conflict markers no longer recognize pedestrians on ramps above or below themselves. In addition, vehicles approaching conflicts with pedestrians will not consider pedestrians on ramps, that are above or below the conflict area, as approaching or blocking the conflict area. **(158402)**
- Fixed an incorrect error message that pedestrians approaching a PT vehicle have no route, when the only route requires usage of an elevator. **(157582)**
- For the computation of the pedestrian density on input areas, pedestrians on ramps above or below the input area are no longer considered. These pedestrians caused a too high density, which in turn could delay insertion of pedestrians due to too high densities on input areas. **(158403 ❗)**
- Pedestrian partial routing decisions on waiting areas of elevator groups no longer cause the simulation to abort in specific situations. **(157979)**
- Pedestrians will no longer wait on ramps or stairs for the arrival of a PT vehicle. **(157872)**
- Pedestrians with a given construction element are now always contained in the relation of that construction element to all pedestrians on that construction element. **(158139)**
- The simulation no longer crashes when pedestrians enter an area with a waiting time distribution, that is also a waiting area for an elevator group or a PT stop. The waiting time distribution will be ignored in these cases. **(158454)**
- When evaluating formula filters for boarding volumes, the attribute values of pedestrians after they arrived at the PT waiting area are now used consistently. **(158621 ❗)**

Workspace

- A progress dialog is now displayed when reading evaluation data, as this operation might take several minutes, depending on the amount of collected evaluation data. **(185863)**
- Vissim no longer crashes if the connection to the license is lost for more than five seconds. **(188638)**

❗ Breaking Changes

Meso Simulation

- Simulation results of meso simulations with micro sections can be different when compared to previous versions. **(189204 ✅)**

Scenario Management

- The now correctly updated conflict areas after loading a scenario may cause simulation results of scenarios to differ to those of previous versions. **(188284 ✅)**

Signal Control

- Fixed Time: In networks containing fixed time signal controllers with daily signal program lists, and if the start time of the simulation is not midnight, simulation results may differ to those of previous versions. **(184115 ✅)**

Vehicle Simulation

- Due to the possibly changed behavior of vehicles at specific conflict areas, simulations results can differ to those of previous versions. **(188281 ✅)**

Viswalk

- In networks containing PT stops with boarding volumes that have filter formulas, simulation results can differ to those of previous versions. **(158621 ✅)**
- In networks containing sections with an additional level which contain a PT stop, results of area measurements can differ to those of previous versions. **(157658 ✅)**
- Simulation results in networks containing ramps above or below areas with pedestrian input can differ to those of previous versions. **(158403 ✅)**

2024.00-00 [264195]   2023-07-31

⊕ New Features and Changes

Cloud

- ⊕ Opening calculation results from the MRU list: When opening a cloud model from the MRU list that has a corresponding calculation result, there is now an option to also open the calculation result. **(183172)**

File Handling

⊕ When trying to save a network that was created with an older Vissim version, the user must now confirm to overwrite the network file (*.inpx). Overwriting the file will update the file version, which would prevent older Vissim versions from opening the file. This confirmation can be disabled in the user preferences. **(131569 | 16892)**

Graphics

⊕ It is now possible to create pavement markings with user defined images. These will be displayed in 2D and 3D mode. See the document "Vissim 2024 - What's new.pdf" for details. **(156374 | 5707)**

⊕ Several pavement marking images (*.PNG} were added to the texture library in Vissim. These were prepared to be used with the new functionality "pavement markings with user-defined images" and are available at \Textures\Pavement Markings (the default directory for such pavement markings). **(187310)**

⊕ The library of traffic sign images (*.PNG} was updated and enhanced. They can be used for example on traffic signs mounted to 3D traffic signals. They are available at \Textures\Signs. **(187311)**

Network Editor

⊕ It is now possible to configure and display labels in the network editor for the following network objects: pedestrian and vehicle routes, pedestrian route locations, lanes, conflict markers and elevator doors. See the document "Vissim 2024 - What's new.pdf" for details. **(156517 | 7918)**

⊕ The action 'Recalculate Spline' in the context menu of links now yields better results for z-offset of the link points. **(157781 | 13468)**

⊕ The lines connecting the route locations of pedestrian routes now show the direction of the route via small arrows. See the document "Vissim 2024 - What's new.pdf" for details. **(158158 | 14739)**

OpenDRIVE Import

⊕ Vissim is now able to import more projections from the 'geoReference' entry in an OpenDRIVE file (.xodr) successfully. **(171621)**

Signal Control

⊕ Vissim will now send vehicle positions in WGS84 coordinates to signal controllers supporting "Vehicle to Infrastructure" (V2I) communication using the identifiers SC_DLL_DATA_V2I_VEH_LATITUDE and SC_DLL_DATA_V2I_VEH_LONGITUDE. **(229270)**

Vehicle Simulation

⊕ The driving behavior attribute 'Advanced merging' is now always active and cannot be deactivated anymore. **(158502 | 16095 🔴)**

⊕ Vehicles approaching conflict areas with 'Avoid Blocking' enabled now better assess if their front vehicle will have to stop inside or after the conflict area. This prevents needless stops in front of the conflict area. **(159134 | 17943 🔴)**

Viswalk

⊕ Labels for pedestrians can now be setup in the graphics parameters for 'Pedestrians In Network'. See the document "Vissim 2024 - What's new.pdf" for details. **(157748 | 13393)**

⊕ Pedestrians at conflict areas will now anticipate routes of approaching vehicles if the value of the corresponding attribute is set to 100%. Otherwise, all pedestrians will not anticipate routes of approaching vehicles. The anticipation of routes cannot be enabled for individual pedestrians. **(166572 🔴)**

⊕ Pedestrians at the head of a central service point selection queue now interpret the time distribution of the partial routing decision area as a reaction time to notice a free desk. This means that the pedestrians will not immediately proceed to a free service point immediately, but instead, will dwell for an additional duration at the queue head and then continue to proceed to the free desk. **(177916 🔴)**

⊕ The default placement of labels of various network objects like pedestrian inputs, pedestrian routing decisions or pedestrian attribute decisions, has been improved to prevent the labels from blocking the selection of those network objects in the network editor window. **(176511)**

Workspace

⊕ Vissim now has an automatic backup feature that can be activated and configured in the user settings. When activated, Vissim saves the network and layout at regular time intervals if any changes were made. See the document "Vissim 2024 - What's new.pdf" for details. **(156017 | 350)**

⊘ Breaking Changes

COM Interface

⊘ The COM function 'RemovePedestrian' now only marks pedestrians for removal instead of removing them immediately. **(159101 | 17908)**

Vehicle Simulation

⊘ In networks containing conflict areas with 'Avoid Blocking' enabled, simulation results can differ to those of previous versions. **(159134 | 17943 ⊕)**

⊘ In networks containing driving behaviors that have 'advanced merging' disabled, vehicle behavior and simulation results will differ to those of previous versions. **(158502 | 16095 ⊕)**

Viswalk

⊘ In networks containing pedestrian vehicle conflict areas with the attribute 'Anticipate routes' set to a value of 100%, the behavior of pedestrians at that conflict area and the simulation results will change. **(166572 ⊕)**

⊘ In networks containing service point selections with central queues, the behavior of pedestrians and the simulations results will differ to those of previous versions. **(177916 ⊕)**