PTV Vistro 2024 Release Notes

Last modified: 2023-10-31

2024.00-01 [269410]

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2023-10-30

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✅ Fixed Bugs

Calculation

- ✅ Delayed Vehicle Green: In certain situations it was possible that the signal timing optimization showed the message 'Split Optimization only works for cycletimes greater or equal the minimum cycle time (X s)', even if all timings were set up correctly. The reason was that delayed vehicle green was not taken into account correctly. This issue was fixed. **(190815 🔴)**

File import / export

- ✅ Synchro import: When a file contained an invalid row identifier, Vistro would show many error messages. Now it is possible to suppress further error messages. **(198714)**

Signal timing optimization

- ✅ Undo: Undo did not work correctly after optimization. The splits were not set to the correct values before the optimization. This issue was fixed. **(197228)**

Simulation

- ✅ Crosswalks too short: An issue was fixed, where crosswalks would not cross both entry and exit, when a median was present. The export of crosswalks on roundabouts was improved, too. **(194980)**

Trip Distribution tab

- ✅ Many zones: Vistro sometimes crashed, when the trip distribution tab was opened in a network with more than 150 zones. This issue was fixed. **(194108)**

Trip Generation

- ✅ ITE Trip Gen: When the 'Fitted Curve' setting is used in the dialog ITE TripGen, Vistro now also transmits the values Quantity, %In, and %Out to the zone. This way the values are consistent. **(198808)**
- ✅ Report 'Trip generation summary': The reporting for zones with data entry type 'Trips' was changed. The value trip generation rate no longer is reported. Quantity, %In, and %Out are reported but grayed out. **(198820)**

🔴 Breaking Changes

Calculation

- 🔴 Signal timing optimization: Optimization results might be different, if delayed vehicle green is set, because Vistro can now use smaller cycle times in certain configurations. **(190815 ✅)**

2024.00-00 [267609]

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➕ New Features and Changes

Calculation

- Emissions: Vistro now calculates emissions on signalized intersections, that are calculated with HCM 2010, 6th or 7th Edition. The calculated values are fuel consumption and emitted CO, NOx, and VOC. They are shown in a new Emissions sub-table in the traffic control tab. Calculations can be influenced with global settings for the emitted substances per unit of fuel. The Volumes tab now includes a Proportion of EVs % per signalized intersection to easily account for an electric vehicles in the volumes. This value reduces the total vehicles contributing to emissions calculations resulting a reduction in fuel consumption and emitting gases. The total emissions for the network are shown in the network statistics window. The values are also written to the reports. **(184150)**

Graphical editors

- Channelized lanes and bypasses: The visualization of dedicated lanes, i.e. channelized lanes or bypass lanes that do not reach the stop line, has been improved. The length of such lanes is now measured starting at the deviation point where the movement starts being separated from the main approach. In previous versions, this length was measured beginning at the stop line. The new visualization is closer to the resulting Vissim network after an export. **(175357)**
- Channelized turns: The display of channelized turns with a dedicated target lane was improved. The movement now attaches smoothly to the target lane. If the target lane is exclusively used by the channelized turn, the target lane no longer starts at the intersection but further downstream. **(161120 | 2186)**
- Roundabouts: The visualization of roundabouts was substantially improved. The values Entry Radius and Exit Radius now have an influence on how entries and exits are drawn. The inner area of the roundabout now is transparent. **(175356)**

Multi Change

- Show Name: The approach value 'Show Name' was added to the list of values selectable in the Multi Change window. **(193639)**

Simulation

- Delayed Vehicle Green exported: The parameter 'Delayed Vehicle Green' is now exported directly and used by Vissim in the ANM import. In earlier Vistro versions, overlaps where created in the prbc file, and the value was written to the 'Delay Green' value of the overlap. This is no longer necessary. Now, the Vistro's 'Delayed Vehicle Green' value will directly be imported as 'Delay Green (LPI)' in the Basic Timing table in Vissim, and no overlaps will be created. **(183989)**

Traffic Control tab

- Rows rearranged: The order of rows in the grid was changed for HCM analysis types. The sub-table 'Phasing & Timing' was split up into two sub-tables: 'Phasing & Timing (Basic)' and 'Phasing & Timing: "Active Pattern"', where "Active Pattern" stands for the currently selected pattern. The Basic sub-table contains values that are the same in all patterns. The "Active Pattern" sub-table contains values that are specific for each pattern or the Free Running timing. These changes also affect the reporting. **(169071)**

Traffic Control tab & Vissim export

- Improved consistency: Several changes were made to improve the export to Vissim and to have controllers in Vistro that have consistent coordination settings. Vistro now automatically determines start-up signal groups to avoid warnings in Vissim. For coordinated controllers, Vistro automatically generates coordinated flags on signal groups, if none have been set. The ICA check now points out inconsistencies between the controller and the coordinated flags of the signal groups. On the other hand, for isolated, fully actuated controllers, cycle length 0 is now exported. **(184720)**

Trip generation tab

- ITE TripGen: The ITE TripGen Graph Look Up dialog was extended. It now shows data statistics once a specific land use has been selected. The additional statistics include number of studies, average number of items with respect to the independent variable, average rate, standard deviation, fitted curve equation, R squared, and directional distribution. **(189489)**

Workspace

- Menu entry for start page: The menu entry 'Open start page in web browser' was added to the 'View' menu. It opens the start page in a web browser. **(183808)**

⊘ Breaking Changes

Calculation

⚠ Lead/Lag: Results on Free Running controllers will be different, if lead/lag flags used to affect the resulting sequence. **(161153 | 2279)**