PTV Vistro 2021 Release Notes

PTV GROUP

the mind of movement

Last modified: 2021-02-01

2021.00-03 [161958]

⊕ New Features and Changes

Graphical editors

⊕ Target lanes for channelized turns: When the setting 'Channelized Turn has Target Lane' is checked, this fact is now reflected in how the intersection is drawn. It is now visually clear that there is a lane that is only accessible via the channel. This also affects the ANM export to PTV Vissim. **(1840)**

Simulation & ANM

⊕ Target lane calculation: The calculation for target lanes of movements was improved. One example are merge sections on freeways. The movements from the freeway section are now connected to the inner lanes, not to the outer lanes. It is no longer necessary to adjust the connectors in PTV Vissim. **(1838)**

✓ Fixed Bugs

Graphical editors

✓ Crash when removing turns: An issue was fixed, where Vistro could crash, after all movements were removed from an approach, i.e. when an approach was converted to an outbound one-way street. **(2066)**

Intersection setup grid

✓ Exit pockets: Vistro no longer crashes, when the number of exit pockets on inbound one-way streets is edited. **(2064)**

Reporting

✓ First figure number: An issue was fixed, where sometimes report settings were not set or saved correctly. For example, the first figure number could have a very large number. Vistro now issues a message, when values in the reporting dialog were changed but the network was not saved. There is now also an indication, that reporting parameters are only saved when they are changed in the base network. **(2067)**

2021.00-02 [160582]

✓ Fixed Bugs

Calculation

✓ Pedestrian LOS calculation: An issue was fixed on signalized intersections with fully actuated controllers. The LOS calculation for pedestrians and bikes (see 'Other modes') is now based on the calculated cycle time, which depends on the volumes on the intersection. In earlier versions, the calculation was wrongly based on the entered cycle time. **(2060 ❗)**

✓ Roundabouts, pedestrian impedance: The value 'Pedestrian Impedance' in the roundabout calculation according to HCM no longer can get negative for very high pedestrian volumes. The value now is cut off at 0. **(2061)**

Main window

✓ Technical support: An issue was fixed, where the 'Technical support' menu entry did not work correctly in some cases. This issue only affected version 2021.00-01. **(2063)**

❗ Breaking Changes

Calculation

⊘ Pedestrian LOS calculation: Results on fully actuated controllers will be different. **(2060** ✓**)**

2021.00-01   [159560]

⊕ New Features and Changes

Simulation & ANM

⊕ The Vissim previewer was updated to a new version (2021.00-02). The location of crosswalks on roundabouts was improved. **(2051)**

Trip assignment tab

⊕ Negative volumes: Volumes related to removed zones are now displayed as negative values. Before, these values were displayed in brackets. The values are also copied as negative values when transferred to Excel. **(2041)**

⊘ Fixed Bugs

Graphic parameters

⊘ Queue Length: The boxes drawn when activating the graphic parameter 'Queue Length' were sometimes skewed. This issue was fixed. **(2035)**

Main window

⊘ Technical support: The menu entry 'Technical Support' now opens the correct website. **(2044)**

Reporting

⊘ Signal warrants: In the table 'Warrant Analysis by Hour', the 'Volume' column in the 'Minor Street' section now shows the higher of the minor street volumes. Before, the sum was shown. This does not change the calculation results, it only clarifies, which numbers are used. The same values are now also shown in the reporting dialog. Furthermore, in the traffic control tab for all-way-stops, it is now possible to change the priority scheme of an intersection. This only affects the signal warrants calculation, no other calculations. **(2056)**

Scenario management

⊘ Renaming scenarios: Vistro no longer crashes, when a second scenario is being renamed while the name of the first scenario is still being edited. **(2048)**

Simulation & ANM

⊘ Stop bar positions: In special cases, the links in the resulting network in Vissim ended too far upstream. This happened mostly for large stop line positions. This issue was fixed. **(2050)**

2021.00-00   [157893]

⊕ New Features and Changes

Data model

⊕ Intersection numbers: It is now possible to use numbers in the range of 1000 and above for intersections. In earlier versions, numbers starting at 1000 up to about 1200 were reserved internally, depending on the size of the network. **(2002)**

⊕ Minimum green: There are now two global settings for minimum green: "Minimum Green, Through" and "Minimum Green, Left". The through setting is only applied to through movements. The left setting is applied to left movements, but also to right movements and u-turns. It is not applied to pedestrian signal groups. **(1913)**

Dialogs

⊕ Controllers: The new dialog 'Controllers' is now accessible through the menu (Signal Control -> Edit Controllers...). It can be used to change a controller's ID and description. It also shows the intersections, which are controlled by a given controller and its coordination group.
Furthermore, the handling of controller IDs was improved in general. When a new ID is assigned to an intersection, that ID will in general also be assigned to the corresponding controller.
Care has to be taken, when scenarios already exist. When a controller gets a new ID in the base network, changes to that controller, that already exist in a scenario, will be lost. **(1866)**

File import / export

⊕ Merge data: There are two new 'Merge data' entries in the import and export menus, that can be used to transfer data from one network to another. The data is exported from the first network and imported to the second network. All data is read additionally, which means that data in the target network remains unchanged. All the imported data is added to the existing data. This is the difference to the 'Updata data' feature, where existing data is updated. **(2016)**

⊕ Synchro export: The export was improved. Link polygons are no longer exported, leading to a cleaner result. **(2022)**

⊕ Updata data: A network can be updated with data from a second network using the 'Update data' exports and imports. The settings 'Signal Timing', 'Geometry and Lane Configurations' and 'Turn Volumes' can be used to determine, which type of data should be updated. Other than the 'Merge data' feature, this feature is used to update existing data, not to add new data. **(2019)**

Graphical editors

⊕ Background maps: The OSM background maps have been removed. Instead PTV maps in four color gradings are offered. **(2017)**

⊕ Radius corner curb: The value 'Radius Corner Curb' is now used when an intersection is drawn. In pre Vistro 2021 networks that value was by default 0, leading to sharp edges, when such a network is opened in Vistro 2021. To change that value in pre Vistro 2021 networks on all intersections at the same time, 'Radius Corner Curb' was added to the attribute list in the Multi Change dialog.
This value now also affects the Vissim export. **(1770)**

Intersection setup tab

⊕ Crosswalk setback: The new value 'Crosswalk Setback' can be used to change, where a crosswalk is drawn. Negative values are allowed. This also affects the Vissim export. **(1976)**

⊕ Stop line setback: The position of the stop line can now be changed using the new value 'Stop Line Setback' in the Intersection Setup grid. Positive and negative values can be entered. This value is applied to the Vissim export. **(1951)**

Non-graphical editors

⊕ Approach directions: The cells in the 'Approach' row are now editable. It is possible to adjust the direction of each approach manually. The set of possible directions depends on the global setting 'Approach directions'. When there are no free directions (f.e. four approaches and global setting 'Prefer main directions'), Vistro automatically adjusts the other directions. **(1548)**

Simulation & ANM

⊕ Significant geometrical improvements: The export to Vissim was improved. The locations of links and crosswalks are now identical in Vistro and Vissim. It is not necessary to adjust link polygons after an import in Vissim.
The parameters Crosswalk Setback, Stop Line Setback, and Radius Corner Curb are taken into account. Crosswalks and stop lines now have identical locations in Vistro and in Vissim. The polygons of the outer movements exactly follow the curve seen in Vistro. **(2008)**

Trip assignment tab

⊕ Vehicle miles traveled: The table now has a new column 'VMT' (vehicle miles traveled), that displays the product of volume and length of each path in miles. If the unit setting is metric, the column is called 'VKT' (vehicle kilometers traveled) and displays the value in kilometers.
There is also a new summary row, that displays the sum of all volumes and the sum of all VMTs (or VKTs). For removed zones, where the volumes are displayed in braces, negative values are used. **(2032)**