PTV Vistro 3 Release Notes



Last modified: 2015-11-16

3.00-08 [103068]

Fixed Bugs

File import / export

- ANM export: Vistro no longer exports routes on closed turns that were previously open and have a volume. When the network now is simulated in Vissim, the simulation no longer stops with an error message about invalid routes. (1408)
- Synchro import: After Synchro import the network is now scaled correctly. Previously the network was a little too small. (1412)

Intersection setup tab

Number of pockets: When a left turn had a pocket and the intersection was changed in such a way that the left turn became a thru turn, the number of pockets was shown incorrectly. This issue was fixed. (1401)

Traffic control tab

Signal timing optimization: Signal groups with split 0 were not taken into account when calculating green times of overlaps. As a result, when a controller had type free running, all splits were set to 0. This issue was fixed. (1414)

3.00-07 [102120] 2015-10-21

New Features and Changes

File import / export

Synchro import: It is now possible to import Synchro networks with parallel links. (1384)

Other

 Vistro icon with release number: For a better distinction of different Vistro installations the PTV Vistro icon now includes the release number. (1378)

Reporting

Memory consumption: Memory consumption of the report was reduced considerably. (1379)

Fixed Bugs

Traffic control type

Control type: The was an issue, where in special cases certain valid control types for movements were not available. This issue was fixed. (1383)

3.00-06 [99406] 2015-07-27

Fixed Bugs

Traffic control tab

Missing signal groups: In special cases it was possible that overlap signal groups were missing when a file was closed and reopened. This issue was fixed. (1373) On-street parking: The parking maneuver rate is now calculated correctly when both left-hand side and right-hand side parking are possible and there is only one lane group on the approach. The parking maneuver rates for left- and right-hand side are now added, while previously only one of the values was used. (1346 •)

Trip assignment tab

Path volumes: Due to rounding effects it was possible that paths could have negative volumes, even though they should have had non-negative volumes. This issue was fixed. (1352)

Volumes tab

On-street parking: It is now possible to apply on-street parking (left-hand side and right-hand side) on through lane groups. (1343)

Breaking Changes

Traffic control tab

On-street parking: Calculated values on signalized intersections will be different if on-street parking is applied on both sides on approaches with only one lane group. (1346 ♥)

3.00-05 [96062]

Fixed Bugs

Graphical editors

Deleting intersections: In certain cases Vistro crashed when the network was saved after an intersection was deleted. This issue was fixed. (1336)

Mitigation

- Auxiliary signal groups: The row Auxiliary Signal Groups was added to the mitigation tab. (1339)
- Creating mitigation options: In some cases Vistro crashed when a new mitigation option was created. This issue was fixed. (1335)

Traffic control tab

Two-way stop control: LOS on major flows was improved if there is a lane that only has Rank 1 movements. In that case the LOS is based only on the delay. (1331)

3.00-04 [93735] 2015-01-23

Fixed Bugs

Graphical editors

Inserting paths: It was possible that Vistro could freeze while a path was being inserted. This issue was fixed. (1326)

Scenario management

Signal data: There was an issue where signal group data on movements in scenarios other than the base scenario was lost. This only happened on intersections that were temporarily deleted in the scenario and then reinserted (with the same number). This issue was fixed. (1324)

3.00-03 [92809]

New Features and Changes

File import / export

• Volumes: It is now possible to import and export movement volumes for the complete network or a subset of the intersections through a .csv-file. (1258)

Main window

Vissim preview: The preview in Vissim now uses Vissim 7. (1278)

Fixed Bugs

File import / export

Visum import: There was an improvement in Visum import when the data contained a spatial reference system with TOWGS84 parameters. (1316)

Reporting

Fair share volumes: An issue was fixed where fair share volumes of 0 were stated incorrectly. This happened on approaches that had movements with zero volume and non-zero volume. For the movements with zero volume the volume of the movement with non-zero volume was displayed. (1318)

3.00-02 [91840] 2014-11-11

New Features and Changes

Data model

Shared lanes: It is now possible to define protected movements from shared inner lanes. For this "Protected" or "ProtectedPermissive" can now be selected as control type for shared inner movements in the traffic control tab. This works if "HCM 2010" is selected as analysis method. (1259)

Graphical editors

Controller-ID: It is now possible to show the controller-ID of intersections in the network window. (1286)

Fixed Bugs

File import / export

ANM import: There was an improvement in ANM import when the data contained a spatial reference system with TOWGS84 parameters. (1313)

File import/export

Preview in Vissim: The Vissim window is now no longer closed automatically if the simulation cannot start due to an error in the network. (1307)

Graphical editors

- Background images: There was an issue where backround images could not be saved to the network file. This issue was fixed. (1310)
- Shift network: After a network was shifted it is now marked as changed so that "Save file" actually saves the file. Previously the file was not saved in this case unless another change was made in the network. (1306)
- Text boxes: The size of boxes around graphic parameter texts (such as delay etc.) was corrected. (1249)

3.00-01 [91375]

New Features and Changes

Graphical editors

Translating networks: Networks can be moved to other positions on the background map by performing three steps: (1) The context menu is opened (the mouse position is interpreted as network reference point), (2) select "Map this point to background position" from the context menu, (3) left click on the position on the background map that network reference point corresponds to. The network is then moved to this new position, correctly maintaining the relative distanced in the network. (164)

Volumes Tab

The attribute "Bicycle Volume" is only shown if the control type is "Signalized", because bicycle volume is not considered in the other analysis methods. (1298)

Fixed Bugs

File import / export

- Synchro export: Export of networks with parallel links failed in some situations. (1303)
- Visum import: It is made sure now that all RBC controllers are switched on if a Visum model is imported into Vistro, such that ICA calculation works correctly. (1297)

Graphical editors

Network scale: The network scale shown in the lower left corner of the screen was wrong in some cases. (1269)

Reporting

Large networks: Vistro crashed when printing a report that had more than 1000 pages because of insufficient memory. In that case such a report will now be created without fair share analysis and a warning will be written to the message file. (1289)

Scenario management

Trip distribution tab: When a scenario was opened and the trip distribution tab was open, Vistro could crash. This happened especially whan the scenario had many zones and scenarios were switched often. The crash also could occur when a network file with many zones was opened and the trip distribution tab was open. (1288)

3.00-00 [90661]

New Features and Changes

Data model

OD volumes: The OD volumes are now calculated in such a way that they add up to the total volume of the zone if the shares add up to 100%. Before, it could happen that due to rounding effects the total volume was different from the sum of OD volumes. This has an effect on path volumes and on movement volumes. (1223)

Dialogs

Global Settings: It is now possible to set a default crosswalk width in the global settings dialog. (508 0)

File import / export

- ANM export: The export of roundabouts to ANM (Vissim) has been improved. It is also possible to choose, whether the ANM file should be exported for Vissim 6 or lower or Vissim 7 and higher. (11)
- Visum export: Visum 14 now has an improved import of Vistro network files, that allows immediate execution of assignment procedures. The Visum export in Vistro was therefore removed. (1224)
- Visum import: When a Visum file is imported, it is now possible to determine, whether assignment data and / or path data should be imported. Demand that was defined in Visum can now be transferred to Vistro. (1112)

Graphical editors

- Approach and movement conditions: It is now possible to see traffic conditions (LOS, v/c, delay) on an approach or movement level. (889)
- Background maps: Vistro now shows background maps for any zoom level. In earlier versions, Vistro showed a gray background instead of background maps on very high zoom levels. (1234)

- Bypasses and channelized turns: It is now shown in the graphical editor whether a turn is channelized or a bypass.
 (170)
- Coordination group: It is now possible to show the coordination group number for each intersection that has a controller that belongs to a coordination group. (961)
- Intersection number: It is now possible to show the number of each intersection in the network. (1173)
- Paths and routes: Paths and routes can now be changed after they have been created by pinning intersections and dragging intermediate sections. (33)
- Signal group number: It is now possible to show the numbers of the signalgroups that are assigned to turns in the graphical editor. (1174)
- Turning movements: The arrows and texts for movement volumes (and other values) are now shown with a fixed size. They no longer change their size when zooming in or out. (361)

Installation

- CodeMeter Runtime: The CodeMeter Runtime shipped with Vistro has been updated to version 5.10c. (1123)
- Windows XP: Vistro 3 does not run on Windows XP. (1214 •)

Intersection setup tab

Circulating Roadway Speed: The data row 'Circulating Roadway Speed' was added to the intersection setup tab for roundabouts. This value is only used in Vissim (via ANM export). (1265)

Main window

- File changed: In the title bar an asterisk (*) will be shown, when the loaded file was changed. (1281)
- lcons: There are new icons for the optimization tab and for split optimization. (1179)

Mitigation

• Signal control number: When a mitigation option is created, this option internally uses a better number for its signal controller. This means that when new intersections are created, it is more likely that their signal controller has the same number as the intersection itself. (1180)

Non-graphical editors

Deleting paths and routes: It is now possible to delete more than one path or route at the same time. (836)

Optimization

- Allow half cycles: The checkbox 'Allow half cycles' was removed. Vistro now determines whether half cycles are allowed based on the current cycle times in each coordination group. (1248)
- ♣ Lower and upper bounds: The 'Lower Bound' and 'Upper Bound' in the parameters for cycle time optimization apply now to full and half cycle times. This means that after a successful optimization all cycle times lie within the given range. (1236 ●)

Other

Error messages: All error messages are now displayed on the screen. (1257)

Reporting

- Roundabout, HCM2010: Several data rows from the sub-tables Intersection Settings and Lanes of the traffic control tab were added to the report. (1244)
- Street names: It is now possible to determine for each link, whether its name should be shown or not. The name can when activated be shown in the graphical editor and in the report. (193)

Scenario management

• File management: Project files are no longer saved as base version files plus a set of directories. Project files are now saved as a single file with extension '.vistro'. Files with extension '.vistropdb' can still be opened, but they are no longer written. (1235)

Traffic control tab

• Default signalization: A button was added to the traffic control tab. It allows to define default signalization for the current intersection, based on the control types of the movements. (1172)

- Overlaps: It is now possible to define overlaps on through movements. The auxiliary signal groups for overlaps in general can now be defined in a separate data row. (1171)
- Roundabout, HCM2010: The data rows 'x, volume/capacity' and 'Exiting Flow Rate [veh/h]' were added to the table and the report. (1243)
- ♣ Roundabouts, HCM2010: Bypass control now affects the capacity and delay of a bypass. (1242 ●)
- Roundabouts, HCM2010: The value A no longer changes when the critical headway is overridden. It only changes when the follow-up headway is overridden. (1241 ①)

Trip generation tab

• Add missing paths: This feature was improved. Vistro now finds paths in more situations than before. (1226)

Breaking Changes

Data model

OD volumes: When a Vistro 2 network is opened in Vistro 3, the OD volumes may be slightly different from the OD volumes in Vistro 2. This is because Vistro 3 uses a more consistent way to round OD volumes. (1223 🔾)

Dialogs

Global Settings: The widths of crosswalks, which is shown in the intersection setup tab, now corresponds to the whole crosswalk. In Vistro 2 the width was shown as a width per direction. This means that if Vistro 2 files are opened, the crosswalk widths in Vistro 3 will be twice the value shown in Vistro 2. The width now corresponds to the sum of the widths of the crosswalk links generated in Vissim. (508 ☉)

Installation

Windows XP: Vistro 3 does not run on Windows XP. (1214 ©)

Optimization

• Lower and upper bounds: This change means that optimization results will differ if a coordination group contains half cycles. The upper bound needs to be multiplied by two to obtain the same results. (1236 ○)

Traffic control tab

- Roundabouts, HCM2010: On roundabouts where the critical headway is overwritten but the follow-up time is not overwritten calculation results will change. (1241 •)
- Roundabouts, HCM2010: On roundabouts with bypasses calculation results may differ. (1242 ©)