# **PTV Vistro 4 Release Notes**



Last modified: 2016-11-14

4.00-07 [114360]

## New Features and Changes

## Reporting

CU: Pagebreaks for ICU reports were improved. (1523)

## Fixed Bugs

## **Graphical editors**

Paths: Paths are now drawn correctly in left-hand traffic. (1499)

#### Intersection setup tab

Lost data on certain intersections: When the multi-edit control was used to set the number of lanes in pockets ('No. of Lanes in Pocket'), Vistro created invalid geometries that could not be saved. When the network file was reopened, the geometry of the intersection was unchanged, the edited data was lost. This issue was fixed. (1514)

## Reporting

- Long intersection names: The layout is improved in the tables 'Turning Movement Volume: Summary' and 'Turning Movement Volume: Detail' when very long intersection names are present. (661)
- Signal warrants: Warrant 2 (Four-Hour Vehicular Volume) and Warrant 3 (Peak Hour) are now calculated correctly. (1512)

#### Traffic control tab

Exclusive pedestrian phase: There was an issue with calculation results when an exclusive pedestrian phase was added to an intersection that previously did not have an exclusive pedestrian phase. In this case the results were different from intersections that were set up from scratch. This issue was fixed. (1510)

4.00-06 [112024] 2016-09-05

# New Features and Changes

#### **Graphical editors**

• Future background volumes: It is now possible to show Future Background Volumes in the graphical editor using the "Show Turning Movements" graphics selector button. (1489)

#### Traffic control tab

• Movement directions: In the calculation status of an intersection Vistro now informs about unrealistic movement directions. (1492)

## Fixed Bugs

#### Data model

Turning movements: In some networks directions of turning movements were wrong when additional legs were added. These directions are now fixed in many cases when the network is reopened. This leads to different results in capacity calculations. (1488)

## Reporting

Scaling: The printed report no longer is affected by high DPI settings. Reports are now identical on different computers. (1496)

#### Traffic control tab

HCM 2000 and 2010, two-way stop: For very high demand it was possible that delays were falsely calculated as 0. When the demand was reduced, delays of 10000s where shown. This issue was fixed; delays now remain high for very high demand flow rates. (1485)

#### Trip distribution tab

Invalid values: There no longer appears a technical error message when a value greater than 100% is entered. (1486)

4.00-05 [109549]

## New Features and Changes

## File import / export

Volumes export: It is now possible to import and export the volume factors "Peak Hour Factor", "Base Volume Adjustment Factor" and "Other Adjustment Factor". (1464)

#### Installation

♣ Update of CodeMeter-Runtime to version 6.20: The Codemeter-Runtime has been updated to version 6.20. This also changes the user interface of the CodeMeter-WebAdmin. The update of the CodeMeter-Runtime must be performed manually on servers with network dongles on which PTV Vistro is not installed. The CodeMeter-Runtime version 6.20 can be downloaded from the download area of the PTV Vision Traffic-License-Server. (1456)

# Fixed Bugs

#### File import / export

- Synchro export: The export now works correctly when the Controller IDs do not have the same order as the intersections (example: Intersection 1 has Controller ID 2 and Intersection 2 has Controller ID 1). (1475)
- Synchro import: It is now possible to import files that contain detector numbers between 17 and 32. (1467)

#### **Optimization**

🗸 Log file: The log file no longer contains German text after running a network optimization. (1455)

#### Reporting

- Fair share reports: For zero future total volumes Vistro showed 'unendl.' (German) or 'NaN' (English) for infinite values. Now infinite values are marked with '-'. (1463)
- Mitigation report: Mitigation reports now show the correct scenario. (1460)
- Signal warrants report: The 'Population < 10000' parameter sometimes was shown as 'Yes', even though 'No' was set on the intersection and the calculations were correctly based on the setting 'No'. This issue was fixed. (1481)

#### Scenario management

Paths: Adding paths in the base scenario no longer invalidates data in other scenarios. Previously it was possible that when paths were added in the base network, paths in other scenarios would disappear. This issue was fixed. (1477)

4.00-04 [107331]

## New Features and Changes

#### **Simulation**

• Preview in Vissim: The Vistro network preview was updated. As a consequence, some issues were fixed. For example, vehicles no longer enter the network backwards. (1439)

## Fixed Bugs

## File import / export

- Synchro export: The export no longer produces invalid files if the Vistro network contains intersection numbers greater than 10000, or contained such intersections in the past. Furthermore, an issue was fixed were wrong volumes were exported. (1445)
- Synchro import: The import was improved in several ways with respect to detectors, crosswalks and pocket lanes. (1446)

## **Graphical editors**

Paths: Paths containing u-turns are now always drawn correctly. Previously it was possible that short loops in paths containing a u-turn were not drawn at all. (1453)

## Reporting

- Fair share reports: In special situations rounding issues caused slight inconisistencies. When the volume of a turn is summed up over all zones, it can no longer exceed the future total volume. (1443)
- csv, html: Reports with file format .csv and .html no longer contain line breaks within tables. Line breaks are now only added to .pdf reports. (1438)

#### Traffic control tab

HCM2010, signalized: On fully actuated controllers permissive left turns where not detected correctly in all cases. Hence phase durations tended to be too small, especially when left-turn volumes were high and the other volumes were low. This issue was fixed. (1440)

# 4.00-03 [105330]

#### New Features and Changes

## File import / export

• Volumes export: It is now possible to select volume types for export even if they cannot be re-imported to Vistro. This feature can be used for reporting. (1426)

#### Fixed Bugs

## File import / export

- Synchro import: Import of detector data was improved. This is especially relevant if the network is simulated in Vissim. (1434)
- Vistro 1.1 files: Vistro no longer crashes when a file written with Vistro 1.1 is being read that contains overlap signal groups. (1436)
- Visum: In certain cases it was possible that Vistro crashed when opening a network file. This only happened for networks that were originally imported from Visum and only if the intersection geometries were afterwards edited in a certain way. This issue was fixed. (1423)

#### Mitigation

Signal optimization: Signal optimization now works again for mitigated scenarios. This issue only affected Vistro 4.00-02. (1431)

#### Non-graphical editors

Lane configuration: In networks imported from Visum it was possible that when a lane configuration was added to an approach, the 'Turning Movement' value was wrongly changed to 'Unknown' and it was no longer possible to edit turn volumes. This issue was fixed. (1424)

## **Optimization**

- Network optimization: An issue was fixed were network optimization in certain cases did not work correctly if the network was originally imported from a Visum file. (1430)
- Network optimization: When 'Optimize Split and/or Cycle Time' was selected, intersections where all splits were 0 were not optimized. This issue was fixed. (1432)

## Reporting

Fair share reports: Several issues were fixed in the fair share reports. These issues concerned the 'Total Analysis Volume' row in the 'Fair Share Volumes' report and all the values in the 'Net New Site' and 'Total Analysis' reports. All values are now calculated with respect to 'Future Total Volume', no longer with respect to 'Total Analysis Volume'. The report and the entries in the reporting dialog were renamed correspondingly. (1427)

#### Traffic control tab

- Calculation status: The calculation status was wrongly set to 'Error' in certain cases. In these cases wrong error messages about missing signal groups were shown. This issue was fixed. (1428)
- Walk and pedestrian clearance times: When crosswalks were removed on a signalized intersection, the values 'Walk [s]' and 'Pedestrian Clearance [s]' were grayed out on the wrong approaches. This issue was fixed. (1425)

4.00-02 [103953] 2015-12-09

New Features and Changes

## **Optimization**

• Local optimization: It is now possible to perform a local optimization on a controller that is assigned to several intersections. When an intersection is optimized, that has a controller which is assigned to several intersections, all intersections of that controller are taken into account. The splits of signal groups on all intersections of that controller are optimized simultaneously. (1221)

## Fixed Bugs

#### Traffic control tab

Signalized, priority scheme: It is now always possible to set 'Major' and 'Minor' correctly, especially in the directions 'Eastbound' and 'Westbound'. (1421)

4.00-01 [103051] 2015-11-16

New Features and Changes

#### **Graphical editors**

• Control Type: When the graphical parameter 'Control Type' is activated, intersections with control type 'unknown' are no longer shown. They were previously shown with a question mark. (1410)

#### 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)
- ANM import, Synchro import: In some situations link points were placed at the location of intersections so the intersections were displayed incorrectly. This issue was fixed. (1407)

- Synchro / ANM import: There was a wrong error message when a peak hour factor (PHF) of less than 0.25 was imported. This issue was fixed. (1406)
- 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)

# 4.00-00 [101774]

2015-10-12

## New Features and Changes

## Copy & Paste

It is now possible to copy & paste values in the network optimization tab, the trip assignment tab, the trip generation tab and between zones in the trip distribution tab. (1360)

## **Dialogs**

• Network statistics: The network statistics dialog in the View menu now gives an overview about the number of network elements (for example intersections, links, zones) and network size. (1156)

## **Graphical editors**

- Calculation status: Vistro now offers a graphical parameter that shows the calculation status of each intersection in the network editor. This makes it easy to see which intersections already have been modelled in detail. (1385)
- DWG file format: DWG 2013 files can now be used as background images. (1268)

#### License

• Managing licenses: It is now possible to manage licenses using the menu entry Help->License. The button 'Manage license' then opens a dialog with detailed information about the available dongles. (1369)

#### Main window

Help menu: The menu was redesigned and extended. It is now possible to access the Vistro manual directly (PTV Vistro Manual), to access the download area (Service Pack Download) and to contact the support (Technical Support). It is also possible to see license information (License). (1363)

#### Reporting

- Bookmarks: Bookmarks were added to the report for easier navigation. (1354)
- Network statistics: The report now optionally contains a page with network statistics that gives an overview about the number of network elements (for example intersections, links, zones) and network size. (1176)
- Report sections: It is now possible to determine, which sections of a report should be printed. (1074)
- Reporting dialog: The layout of the reporting dialog was improved. (789)
- Time-space diagrams: It is now possible to report four types of time-space diagrams: single direction / flowing off, two directions / flowing off, single direction / arterial bands and two directions / arterial bands. (1349)
- Time-space diagrams: Reverse directions of corridors are now optionally shown in the report. (1238)

#### Traffic control tab

Calculation status: The calculation status of an intersection is now shown in the traffic control tab and as as graphic parameter in the network window (Show Intersection Info -> ICA check). The status shows whether an intersection has yet been set up correctly as to yield correct ICA calculation results (intersection capacity analysis). For example, a signalized intersection for which no signal groups have been defined will show an error status. (918)

- Pedestrian phase: It is now possible to define an exclusive pedestrian phase. This can be done by defining a pedestrian signal group in the new sub-table 'Exclusive pedestrian phase'. The signal group can be selected in the sequence editor and is taken into account in LOS calculations etc. Exclusive pedestrian phase information is also used when a Synchro file is imported. (902)
- Two-way-stop: There is no upper limit anymore on the potential capacity of minor street movements. In earlier versions there was an upper limit of 1700 veh/h. This limit may now be exceeded if the follow-up gap is set to a small value. (1330)

# Trip generation tab

Deleting zones / gates : It is now possible to delete zones and gates via context menu and by using the 'del' key. (1392)