PTV Vistro 7 Release Notes

PTV GROUP

the mind of movement

Last modified: 2020-01-14

7.00-07 [150168]

✅ Fixed Bugs

File import / export

- ✅ Synchro import: An issue was fixed, where importing a Synchro file failed with the error message 'The attribute TIMEOFFSET with value ... failed to parse'. **(1887)**
- ✅ Synchro import: An issue was fixed, where the import failed with error messages like 'KEY: ID already exists' and 'An internal error occurred in ANM [...]'. This happened when the original Synchro network contained lanes that did not have any movements in the downstream intersection. **(1890)**
- ✅ Volumes in Synchro import: An issue was fixed, where movement volumes could be off by 1. This fix also affects HGV shares. **(1881)**

Main window

- ✅ Buttons sizes fixed: Images placed on buttons now have the correct size again. This, for example, affects the buttons 'Rectangular Zoom', 'Show entire network' and 'Measure Distance' in the network editor view. **(1931)**

Mitigation

- ✅ Create default signalization: It is now possible to create default signalization for mitigation options. **(1883)**

Optimization

- ✅ Unused controllers: Network optimization now also works, if there is a signal control in the coordination group, that is not assigned to any intersection. **(1884)**

Reporting

- ✅ Fixed crash: In certain cases Vistro crashed, when printing a report for a scenario. This issue was fixed. **(1943)**

Traffic control tab

- ✅ Exclusive pedestrian phase: Exclusive pedestrian phases are now drawn with the correct color in the phase diagram. Previously, they were always drawn as inactive. **(1905)**

7.00-06 [142961]

➕ New Features and Changes

Graphical editors

- ➕ Distance measuring tool: Vistro now has a tool to measure distances in the network editor. It is accessed by clicking 'Measure Distance' in the toolbar of the network editor, or by using the right mouse button inside the network editor window and selecting 'Measure Distance'. **(524)**
- ➕ Improved highlighting of links: A link is now only highlighted in gray, when the mouse is very close to it. Furthermore, a link is now always highlighted in blue, when the mouse is directly over it. **(1857)**

✅ Fixed Bugs

- ✅ Channelized turns: An issue was fixed with odd looking links. These were drawn, when there where channelized turns between approaches with an angle close to 180 degrees. Channelized turns now are no longer drawn, when the angle between the approaches is more than 170 degrees. **(1871)**
- ✅ Incorrect width of exit pockets: An issue was fixed, where exit pockets were drawn with the wrong width, causing gaps between the curb line of the link and the curb line of the upstream intersection. **(1862)**

- ✅ Turn arrows: An issue was fixed, where turn arrows could not be clicked correctly after using the zoom buttons in the network toolbar. **(1877)**
- ✅ Yellow lines: Yellow lines are no longer drawn on one-way streets. **(1875)**

7.00-05 [141209]   **2019-03-21**

⊕ New Features and Changes

- ⊕ Highlighting closed turns: Vistro no longer highlights the approach, when a closed turn is selected. Instead, nothing is highlighted. **(1856)**
- ⊕ Line up thru lanes: Network visualization was improved considerably. Opposing left-turn lanes on an intersection now lie opposite each other. When there are back-to-back left-turn lanes between intersections, Vistro no longer automatically draws an extra median, but will share the left-turn lane space. A median is only drawn, if it is defined when checked in the intersection setup. **(1683)**
- ⊕ Lock background images: The context menu of background images and the Map Layers control now have entries to lock background images. A locked background image cannot be moved, deleted or resized. This feature is to prevent accidental movements of background images. **(1332)**
- ⊕ Network geometry opacity: The 'My network' entry in the Map Layers now has an additional setting for opacity. This setting can be used, to make the network semi-transparent in order to see the underlying map or background graphic. The shortcut Ctrl-w can be used to switch between fully transparent and fully opaque. **(1686)**
- ⊕ Use actual lane widths: Vistro now uses the lane widths defined in the Intersection Setup tab for visualization. **(1805)**

✅ Fixed Bugs

- ✅ Background images: An issue was fixed, where background images could not be selected after opening a network file. **(1851)**

7.00-04 [139597]   **2019-02-11**

⊕ New Features and Changes

Main window

- ⊕ Intersections: The 'Intersections' drop down list is now resizable to a custom size. **(1763)**
- ⊕ Multi change: The new entry 'Multi Change' in the Edit menu opens a new dialog, where values at a single intersection or in a group of intersections can be set and updated at the same time for the current scenario. For example, these values include, 'Analysis Method', 'Minimum Green' and 'Growth Factor'. Selection sets of intersections can be filtered or sorted by name, number, control type, signal control numbers, or coordination group. **(220)**
- ⊕ Scenarios and map layers: The drop down lists showing scenarios and map layers are now resizable to a custom size. **(1764)**

✅ Fixed Bugs

Graphical editors

- ✅ Setting 'My network': When the setting of 'My network' is changed, the network now immediately becomes visible or invisible, depending on the setting. **(1837)**

Intersection setup tab

- ✅ Number of lanes in pocket: The value 'No. of Lanes in Pocket' can now also be edited, if the outermost lane is a through lane. **(1826)**

Non-graphical editors

- ✅ Lane configurations: When several lane configurations are changed at the same time, the changes are now only applied to approaches with suitable turning directions. If an approach has no suitable turning directions, it remains unchanged. **(1832)**

7.00-03 [139033]

⊕ New Features and Changes

⊕ Multi-edit lane configurations: It is now possible to change the lane configurations on several approaches at the same time. Similar to multi-edit on workflow table rows, select a lane configuration on an approach. Press and hold left-click and drag the mouse to highlight other approaches, then select the desired lane configuration. **(1711)**

⊕ Pockets: When a lane configuration is selected that contains an outer exclusive left-turn and/or right-turn lane, Vistro now automatically defines these as pocket lanes. This pocket is applied to the outermost right- or left-turn lanes or to only the right-turn lane in a single left-turn and single right-turn lane configuration. The number of pockets lanes can be removed by overwriting with 0 to obtain a full lane. **(1728)**

⊕ Search function: The Intersection setup, Volumes and Traffic Control tabs now offer a search function to filter the rows that are displayed. For example, entering 'Volume' reduces the workflow table to all rows, that have 'Volume' in their name. **(1782)**

Traffic control tab

⊕ Default signalization: Right-turn movements with control type 'Overlap' now get two auxiliary signal groups instead of one, when 'Create Default Signalization' is clicked. The additional signal group is the corresponding left turn to the right-turn overlap. **(1791)**

⊕ Pedestrian clearance: When 'Create Default Signalization' is clicked, Vistro now uses crosswalk lengths and and default walking speeds to determine pedestrian clearance times. If custom crosswalk lengths are not set, pedestrian clearance time calculations are estimated from lane configurations and median widths used. Calculated values are for planning purposes only. The user is responsible for providing exact pedestrian clearance times per agency standards for design and field implementation. **(1790)**

⊕ Sequence adjustments: When the control type of a movement is changed, Vistro now automatically adjusts the sequence, if the current setup is a default configuration. It is no longer necessary to adjust the sequence manually in those cases. For example, the sequence is adjusted when switching between 'split' and 'permissive/protected' control types. This feature works best with automatic optimization. **(403)**

Volumes tab

⊕ Growth factor: For the value 'Growth Factor' now four digits can be entered. **(1818)**

⊘ Fixed Bugs

Graphical editors

⊘ Approach conditions: When 'Show Unbalanced Flows' or 'Show Approach Traffic Conditions' is active, Vistro now only shows data for approaches, that have entry lanes, such as for the travel direction on a one-way leg. **(1813)**

⊘ ICA check: ICA check for control type 'Unknown' now is always successful. **(1817)**

7.00-02 [137930]

⊕ New Features and Changes

Data model

⊕ Approach directions: Vistro has a new global setting 'Approach directions'. This setting is used to determine, whether Vistro should only use main directions (like 'Northbound') for the first four approaches of an intersection, or whether it should also use subordinate directions (like 'Northwestbound'). The former setting is called 'Prefer main directions', the latter 'Use main and secondary directions'. The value 'Prefer main directions' is used for new files. Old files keep their previous value 'Use main and secondary directions'. The setting can only be changed in the base network. **(1707)**

Graphical editors

⊕ Lane group values: The third of the graphic parameter buttons was renamed to 'Show Detailed Traffic Conditions'. In addition to turn values it now shows lane group values on signalized intersections. This means that lane group volume/capacity - among others - can now be shown graphically. **(1738)**

⊕ Show traffic conditions: The textboxes, that are shown when 'Show Traffic Conditions' is activated, are now colored according to LOS. The same colors are used as for turning movements. The same applies to 'Show Approach Traffic Conditions'. **(1740)**

Traffic control tab

- ⊕ Overlaps: Signal groups used as auxiliary signal groups in overlaps are now marked 'ov' in the phase diagram. **(1760)**
- ⊕ Phase diagram: Phases that are not active on the current intersection - but on a different one - are now drawn in light green. **(1759)**

✓ Fixed Bugs

Graphical editors

- ✓ Background images: When a background image was inserted and 'Undo' was clicked, it was possible that Vistro crashed. This issue was fixed. **(1800)**
- ✓ Turn arrows: In some situations like deleting an intersection, turn arrows remained in the editor. This issue was fixed. **(1788)**

Installation

- ✓ Fallback licenses: Fallback licenses now work correctly. **(1750)**

Simulation

- ✓ Preview in Vissim: An issue was fixed, where traffic signals did not work correctly in the preview. **(1774)**

7.00-01 [137113]
<div align="right">2018-11-19</div>

⊕ New Features and Changes

Graphical editors

- ⊕ Base volume input: It is now possible to show 'Base volume input' in the graphical network editor. For this, 'Base volume input' can be selected in the 'Show Turning Movements' graphic parameter. **(1717)**
- ⊕ Cycle lengths: Cycle lengths can now be shown in the graphical editor using the cycle length button in the 'Show intersection info' list. **(1762)**

Traffic control tab

- ⊕ Phase diagram: Vistro now prevents that splits exceed the cycle length, when the length of a phase is extended by dragging the mouse. **(1723)**
- ⊕ Workflow optimization: Workflows with signal groups on inner movements were improved. When a signal group is removed from the sequence, it is now automatically removed from the movement, and the movement is set to permissive. When an inner movement is set to permissive, its signal group is automatically removed from the sequence. **(1689)**

✓ Fixed Bugs

- ✓ CCG: An issue was fixed, where Vistro froze, when 'CCG Third Edition' was selected. This happened, for example, when signal group numbers where set or when 'Create Default Signalization' was clicked. It only happened, if there was an LTR lane group with medium to high volume. **(1748)**
- ✓ ICA check: ICA check now reports, when a signal group is assigned to a movement but not placed in the Sequence. This is treated as an error. **(1713)**
- ✓ ICU: An issue regarding user defined saturation flow rates was fixed. Now the user defined values are also taken into account correctly for left turners. **(1751 ⊙)**

⚠ Breaking Changes

Traffic control tab

- ⚠ ICU: Results may change when user defined saturation flow rates are used. **(1751 ✓)**

⊕ New Features and Changes

Background Maps

⊕ The Bings Maps Service Terms of Use is now located in a link in the bottom left corner of the Network Editor. When clicked, the link will go to the Microsoft Bing Maps and MapPoint Web Service End User Terms of Use webpage. **(1667)**

Installation

⊕ The Codemeter runtime has been updated to version 6.60a. **(1641)**

Network editor

⊕ Turn arrows: Turn arrows can now be selected. When a turn arrow is selected, the corresponding 'Base Volume Input' cell in the grid is activated, and it is possible to enter new volume by typing. **(1679)**

Optimization

⊕ A checkbox called "Auto" was added to the optimization toolbar in the Traffic Control Workflow. When checked, updates to elements, such as base volumes, lane configurations, cycle times, control types, signal groups, and sequence will trigger an automatic optimization of the phase split times. When unchecked, changes to these elements will not automatically optimize phase split times and phase splits can be manually adjusted. **(1687)**

Traffic control tab

⊕ Create default signalization: When the 'Create Default Signalization' button is clicked, Vistro now uses signal group numbers based on the major flow directions. The global settings defining default signal group numbers for approach directions, are now only used, if the given direction is on the major flow. **(1712)**

⊕ Create default signalization: When the button 'Create Default Signalization' is used, Vistro now performs a cycle time optimization, if the intersection has no signalization yet. When the intersection already has signalization, and the button is clicked, Vistro performs a split optimization. **(1698)**

⊕ Create default signalization: When the button 'Create Default Signalization' is used. Vistro now leaves spaces for unused phases. For example, Signal group 4 is now always placed in Slot 4 of the first ring, even if there is no Signal group 3. The exception is split phasing, where signal groups now are placed as before. **(1688)**

UI

⊕ Approach direction arrows have been added at the top of the Intersection Setup, Volumes, and Traffic Control Workflow Panels. These arrows are frozen to the top of the panel and indicated the approach direction of the intersection legs. **(598)**

⊙ Breaking Changes

Traffic control tab

⊙ Two-way stop, base critical headway: Calculation results on intersections with major flows with two or more lanes will be different, if no user override was used. **(1631)**

ICA node checking updates due to updates in Visum.

⊙ ICA node checking updates due to updates in Visum. **(1668)**

Traffic control tab

⊙ Two-way stop control: Queue lengths may be different on intersections with u-turns on major approaches. **(1648)**