

PTV Vissim & Viswalk 6

Release Notes

Last modified: 2014-07-17

http://vision-traffic.ptvgroup.com/en/support_vissim
http://vision-traffic.ptvgroup.com/en/support_viswalk

6.00-18 [48470]

2014-07-17

+ New Features and Changes

Evaluations

- + New direct output evaluation "Discharge record". The evaluation contains information about gaps between vehicles passing a green signal head. Each signal head can be included separately (attribute "Discharge record active", default false). This is the same evaluation which was available in Vissim 5.40 as "special evaluation" when added manually to the *.inp text file. In Vissim 6, data collection points are not required. **(7620)**

Network Editor

- + DWG 2013 files can now be used as background images. **(8710)**
- + Editable spline points of selected links in link mode are shown with a minimum size now even if zoomed out. Direction arrows on the link border are only shown when there is enough room to make them clearly visible. **(8475)**
- + It is now possible to delete segments from a segment node from the context menu of the list window. This action is available if a single turn relation edge of a segment node is selected and will delete all segments of the node which correspond to the selected turn relation. **(8529)**
- + The 32 bit edition of Vissim can load SketchUp files up to version 14. **(8719)**

Presentation

- + If no file name is specified for an animation or video file recording, a default file name is used. If no file extension is specified, the correct extension (.ani, .ani.txt or .avi) is added automatically. **(8669)**

Signal Control

- + The detector attribute "All public transport lines" has been removed because it had no effect during the simulation. If the relation "Public transport lines" at a detector includes at least one PT line, only vehicles of the included PT lines are detected. If the relation is empty, all vehicles are detected. **(8732)**

Test Mode

- + New option in the user preferences to activate detectors in test mode by single click. If this option is selected, detectors cannot be selected in the network editor during a test run (e.g. in order to see their attributes in the quick view sidebar). **(8604)**

Vehicle Simulation

- + The new option "Vehicle routing decisions look ahead" is available in the driving parameters. If set, it enables vehicles to anticipate an upcoming static routing decision on the destination link of their current static route. The route to be used from this upcoming decision is selected already when the vehicle passes the previous static routing decision, and that route is considered for the lane choice continuously. A routing decision must have the flag "Combine static routing decisions" set to activate this behavior. **(7060)**

Viswalk

- + The new attribute "CurWalkBehav" of a pedestrian shows the currently active walking behavior. The relation "Current walking behavior" points to this walking behavior with its corresponding parameters. **(8702)**

✓ Fixed Bugs

COM Interface

- ✓ The following functions which have a VARIANT_BOOL as return value or output parameter, did return 1 instead of VARIANT_TRUE (-1): IAttribute::Editable, IAttribute::Scaled, Iterator::Valid. This caused unexpected behavior of VBA scripts. This bug has been fixed. **(8770)**

Demo Version / Vissim Viewer

- ✔ The replay of animation files is no longer restricted by the maximum simulation period of the license. **(8637)**

Dialogs

- ✔ A network file cannot be opened anymore by drag & drop (from the Windows Explorer into the Vissim window) while a modal dialog (e.g. "Link Attributes") is open. **(8102)**

Dynamic Assignment

- ✔ The following bug which has been introduced in Vissim 6.00-05 has been fixed now: A vehicle inserted at an abstract parking lot or at a zone connector miscalculates the distance to downstream vehicles and network objects, assuming its own link coordinate to be zero. Because of this, the vehicle can be inserted too early, too fast and/or not on the best lane. If the abstract parking lot or zone connector is located at a link coordinate beyond the maximum lookahead distance, the vehicle is always inserted on the rightmost lane (leftmost if left-side traffic), even if another vehicle has been inserted on the same lane in the same time step before. **(8706)**

Evaluations

- ✔ Negative values in the result attributes "Vehicle delay (average)" and "Person delay (average)" (node results and delay results) and "Delay (average)" and "Delay (total)" (network performance measurement) do not cause error messages anymore. (The delay of a vehicle in a time step can be negative if the speed exceeds the desired speed temporarily.) **(8764)**

File Handling

- ✔ Layout files can now be read with drag & drop even during a simulation run. **(8385)**
- ✔ Opening of a network file could cause a crash if there was a corresponding layout file with open list windows. This bug has been fixed. **(8743)**

Graphics

- ✔ Connectors are connected to links without any gap in 3D mode, too. **(8590)**
- ✔ Lane markings in 3D mode are better aligned with the link geometry. **(8596)**

Installation

- ✔ If no *.inf file name is given in the command line of a silent setup, the module selection in the default file params.inf is not ignored anymore. **(8399)**

Keyboard

- ✔ The key combinations Ctrl-O (Open) and Ctrl-S (Save) are deactivated during a simulation, test or animation run. The key combination Ctrl-A (Toggle wireframe mode) works only in 2D mode. **(8747)**

Network Editor

- ✔ A double click on a spline point of a link opens the dialog for the z-offset. (This function had been lost in version 6.00-10.) **(8722)**
- ✔ Creating a new free network object when no levels are visible does not lead to an exception error anymore. **(8708)**
- ✔ If a dialog is opened through double click on a network object (e.g. a link or a pedestrian area), a mouse movement immediately after the click on OK in the dialog can be applied as translation to the selected object, i.e. move that object inadvertently. This bug had been introduced in version 6.00-17 and has been fixed now. **(8714)**

Quick View

- ✔ If multiple objects were selected and an attribute was edited which was editable only for some of these objects (e.g. the attribute "Level" for links which is not editable for connectors), the message "Attribute cannot be edited" was displayed for each single object. Now, this message has the option "Do this for all messages". **(8740)**
- ✔ Usage of the item "New" in a drop-down listbox in the quick view window (e.g. for the attribute "level" of a link) doesn't cause a crash anymore. A list window of the respective network object type is not opened in any case but a dialog if there is one. **(8753)**

Read Additionally

- ✔ Obstacles and sections are handled correctly now even if the conflict avoidance is set to "None" and the conflict treatment is set to "Overwrite object". **(8748)**
- ✔ PT data can be read additionally now even if there is a PT line which visits the same link twice. Previously, such data could cause unclear error messages. **(8756)**

Vehicle Simulation

- ✔ If a vehicle passes a parking lot routing decision and selects a parking space which doesn't allow the vehicle to return back to its original route or only to the last link of the original route, problems can happen on the last link of a subsequent static route:
 - 1) The lane change behavior is not reproducible and can be irregular.
 - 2) The simulation run stops with an exception message if the vehicle passes another parking lot routing decision. These problems have been fixed. **(8715)**
- ✔ If the option "Consider adjacent lanes" was switched off in the evaluation configuration for queue counters, a simulation run could stop with an exception message ("in line 174 of file stauzaeh.cpp") when a queue extended upstream across a connector which doesn't connect to lane 1 on the destination link. This bug has been fixed. **(8768)**

Viswalk

- ✔ Area measurements with overlapping sections don't cause an error message anymore. **(8721)**
- ✔ CAD Import of files containing the character "]" in the name of a layer is now possible. **(8703)**
- ✔ Evaluations: The socket width of moving walkways and escalators is subtracted from the total area for the density calculation correctly now. **(8720)**
- ✔ Multiple selected route locations of a pedestrian route can be deleted at once now in the coupled list window "Static Pedestrian Routes" (or "Partial Pedestrian Routes") / "Pedestrian Route Locations". **(8689)**
- ✔ OD travel time results are now correct even if the first measurement interval doesn't start at zero. **(8755)**
- ✔ The values of the entry/exit attributes "Length" and "Horiz. runout area" are not swapped anymore in the dialog "Ramps/Stairways/Escalators/Moving Walkways". **(8734)**
- ✔ Very short ramps could previously cause exception errors or pedestrians trapped on the ramps. This problem has been fixed. **(8698)**

6.00-17 [47709]

2014-06-03

+ New Features and Changes

ANM Import

- + Adaptive import into a network which has been converted from an *.inp file written by Vissim 5.40 is now possible again (provided the network had been created originally by ANM import). **(8452)**

COM Interface

- + The new COM method `Vissim.Net.Paths.ReadDynAssignPathFile()` allows the user to manually trigger reading the path file. The optional parameter `ForceReread` (default: `FALSE`) determines if the path file will always be read, even if it has been read in already. **(8503)**
- + The toll price can now be changed during simulation, also with the COM-interface. Therefore the attributes "TollSOV", "TollHOV2" and "TollHOV3Plus" for the fixed price as well as "TollPricModSOV1", "TollPricModHOV2", and "TollPricHOV3Plus" can be changed. Price changes take effect in the next simulation time step.

Example via VBScript:

```
set MLFac = Vissim.Net.ManagedLanesFacilities.ItemByKey(1)
allTimeIntPricMod = MLFac.TimeIntPricMod.GetAll
'TIPricMod is a variable of type ITimeIntervalPricingModel
' change fixed price "TollSOV" to "9"
TIPricMod.AttValue("TollSOV") = 9
' change price model "TollPricModHOV2" to "2"
TIPricMod.AttValue("TollPricModHOV2") = 2
' deactivate price model "TollPricModHOV3Plus"
TIPricMod.AttValue("TollPricModHOV3Plus") = "" (8647)
```

Data Model

- + The current state of a static 3D model is now persistent, i.e. it is written to and read from the *.inpx file. This allows a 3D model with multiple states to have any one of these stated as initial state. **(8600)**

Graphics

- ⊕ Geometric objects with active display type with active attribute "invisible" are drawn with the display type color as a dashed border line. This allows to distinguish multiple "invisible" display types during editing. **(8499)**

Network Editor

- ⊕ A new free network object (link, pedestrian area, ramp, obstacle, background image, static 3D model, 3D signal head) is now created on the level with the smallest number which is visible in the current network editor window. If all levels are invisible or if there is no open network editor, the object is created on the level with the smallest number. **(8513)**

✓ Fixed Bugs

ANM Import

- ✓ During adaptive import, the signal groups and signal heads are adapted correctly now if the ANM data of a signal controller has changed. **(8642)**
- ✓ Lay-by stops which are very close to a node are now created correctly and are included in the line stops of the respective public transport lines. (Previously, these stops were not included, so they were not visited by the PT vehicles.) **(8644)**
- ✓ The lane widths at a node entry are now always correct. (Previously, in rare cases, the lane widths from the exit of the upstream node had been used instead.) **(8431)**
- ✓ The link sequence of a node route (turning movement, e.g. exported by Vistro) with a destination section between two nodes with different numbers of lanes is created correctly now. **(8678)**

COM Interface

- ✓ Additive reading uses always the default settings now when called from COM instead of the last parameters that had been set in the additive reading dialog. **(8591)**

Dialogs

- ✓ In the signal controller dialog, a fixed cycle time can now be set again for the controller types VS-Plus, Siemens VA and TRENDS. **(8579)**

Evaluations

- ✓ The node evaluation results are now always visible in the list window. It is not necessary anymore to load the node evaluation graph manually in certain cases. **(8585)**

File Handling

- ✓ Camera positions are written to the *.inpx file with 6 decimals. (Previously, only 6 significant digits were saved which could cause loss of data especially with large coordinates.) **(8646)**
- ✓ Network files which contain zebra crossings which extend beyond the length of their link (e.g. because of rounding problems) can be read in now. The length of these zebra crossings is adapted. **(8657)**
- ✓ Reading an *.inp file written by Vissim 5.40 which contains invalid 3D signal head definitions does not cause a crash anymore. Invalid 3D signal heads are fixed. **(8611)**
- ✓ Some users could not create the evaluation attribute database (*.sdf file in the subdirectory *.results\) in a working directory (with the *.inpx file) on a network drive. In order to avoid these problems, this file is now written temporarily to a local directory and moved to the working directory at the end of the simulation run. **(8685)**
- ✓ The import of *.inp files written by Vissim 5.40 which contain many time intervals (e.g. for evaluation) is much faster now. **(8679)**
- ✓ The Vissim 5.4 import function now automatically corrects some frequent errors in the *.inp file:
 - User-defined acceleration functions which do not provide a value for the velocity 0 are now corrected.
 - If a node polygon contains the same point multiple times, the redundant points are deleted. **(8687)**

Graphics

- ✓ 3D signal heads now show flashing signal states correctly. **(8617)**

Lists

- ✓ Deleting an object (e.g. a simulation run) which is used as subattribute of an indirect attribute in an open list doesn't cause a crash anymore. **(8613)**

Network Editor

- ✓ In pan mode (toolbar button with the "hand" icon), creating new objects with (Ctrl+) right drag is not possible anymore. **(8625)**
- ✓ Problems with graphic drivers or hardware which can occasionally result in a diagonal red cross on white background in a large network editor window on 32 bit Windows have been fixed. **(8643)**
- ✓ Segment nodes are updated in the network editor if attributes of their segments are changed in a list window. **(8620)**

Signal Control

- ✓ SC/Detector record: If a controller DLL sends values which are out of the range defined in the *.wtt file, an asterisk is written to the record file/window now. (Previously, Vissim could crash in this situation.) **(8663)**
- ✓ Several problems with 3D signal heads for public transport and their assigned signal controllers and signal groups have been fixed. These attributes are read correctly from *.inp files written by Vissim 5.40 (and adapted automatically if inconsistent), they are shown correctly in the dialog and marked as relevant or irrelevant in lists. **(8607)**

Test Mode

- ✓ PT telegrams are lost if they are entered in the first time step after the call of a signal controller, e.g. exactly at a full simulation second, i.e. always if the simulation runs with only one time step per simulation second. **(8670)**

Vehicle Simulation

- ✓ Vissim doesn't crash anymore if a public transport vehicle is assigned a parking lot route to a parking lot with real parking spaces on a single-lane link. **(8651)**

Viswalk

- ✓ Pedestrians who alight from a PT vehicle to an area which is the destination of a pedestrian route don't cause a crash anymore during a simulation run with activated OD travel time evaluation. **(8652)**

6.00-16 [47138]

2014-04-30

+ New Features and Changes

File Handling

- + The file selection dialog called by "Save As..." or "Save Layout As..." suggests the current file name. **(5276)**

Read Additionally

- + Improved suggested offset value for link and connector numbers: If all existing link numbers are smaller than 1,000 and if all existing connector numbers are smaller than 11,000 a small offset is used for links and connectors, so that the numbering convention can be preserved. Else, the suggested offset ist the next higher multiple of 10,000. This avoids using unnecessary high object numbers. **(8557)**
- + The suggested offset value for object numbers is now the same value as in Vissim 5.40: The suggested offset ist the next higher power of 10 respectively (if there are old object numbers higher than 10,000) to the next higher multiple of 10,000. This avoids creating unnecessary high object numbers. **(8558)**

Viswalk

- + Areas have new result attributes for number of pedestrians (PedsAvg, PedsMax, PedsMin), time in queue (TmlnQueueAvg, TmlnQueueMax, TmlnQueueMin) and queue length (QueueLenAvg, QueueLenMax, QueueLenMin). These attributes contain the average, the maximum and the minimum value of all time steps during the time interval respectively (only for the time spent in this queue) of all pedestrians who have left the queue. This evaluation measures only explicit pedestrian queues, i.e. the area needs to contain a (possibly intermediate) route destination, and both the attribute IsQueue and the new attribute QueueEvalAct must be set to active, and area evaluation needs to be active in the evaluation configuration in order to collect these result attributes. **(6714)**
- + New COM methods Vissim.Net.Pedestrians.AddPedestrianOnArea() and AddPedestrianOnAreaAtCoordinate(). These can be used during a simulation run to add a pedestrian on a specified area (not ramp) with a specified desired speed (in m/s), optionally with a specified relative X/Y offset from the center of the area and a specified X/Y orientation. **(7167)**

✓ Fixed Bugs

ANM Import

- ✔ Importing routes works correctly now even for networks containing connectors which are partially located outside nodes. **(8546)**

Evaluations

- ✔ The managed lanes evaluation doesn't show wrong decimals for simulation time anymore. **(8491)**

Graphics

- ✔ Backgrounds which couldn't be loaded correctly (only the file path and a frame is displayed) can be moved now. (Previously Vissim crashed upon moving such backgrounds). **(8598)**

Lists

- ✔ Changing an attribute of multiple display types in the display types list at the same time is working correctly now. (Previously, for all display types except the first one the change was shown in the network window only after writing and reading the network file.) **(8594)**
- ✔ The SC/detector record configuration of a signal controller cannot be edited anymore in the coupled list "Signal Controllers / SC detector record configuration" (where illegal values could be entered previously) but only in the signal control dialog. **(7941)**

Read Additionally

- ✔ Reading a network file additionally which does not include reference points for background maps, shifted all network coordinates if the network parameters were selected for additional reading, too. This problem has been fixed. **(8566)**

Signal Control

- ✔ External controller dialogs (from the GUI DLL) cannot be opened anymore during a simulation run. (Previously, Vissim could crash if you did this.) **(8528)**
- ✔ Umlaut characters in the user-defined column headers for the SC/Detector Record are shown correctly now. **(8593)**

Simulation

- ✔ Changing relative volumes of routes (from COM or from a signal controller) doesn't slow down the simulation as much anymore. **(8583)**

Vehicle Simulation

- ✔ On-street PT stops can be skipped correctly now. (Previously, a PT vehicle lost its PT stop sequence after having skipped an on-street PT stop due to a randomly drawn or calculated dwell time below 0.1 seconds.) **(8601)**

Viswalk

- ✔ A pedestrian area which contains an intermediate destination of a route is now used completely as destination area even if it is cut into several parts by obstacles. **(8514)**
- ✔ Area measurements with multiple adjacent or overlapping sections handle pedestrians correctly now even if they leave one section and enter another section in the same time step. **(8551)**
- ✔ In the calculation of the dynamic potential, a bug in the treatment of the parameters g and h has been fixed. This service pack restores the behavior as in Vissim 5.40. If you need a behavior similar as in the previous service packs of Vissim 6, increase the value of the parameter g by 1.0. **(8597)**
- ✔ Pedestrians which enter and leave a section in the same time step are now correctly counted in area measurements. **(8683)**
- ✔ Ramp network objects now show the type "Ramp" instead of "Ramp/Stairs". **(8485)**
- ✔ The density calculation for area measurements is now correct even if there are multiple pedestrian classes. Pedestrians on overlapping sections of one area measurements are not counted multiple times anymore. **(8466)**

6.00-15 [46826]

2014-04-02

✔ Fixed Bugs

COM Interface

- ✔ If the COM method Vissim.LoadNet() is called without providing a network file name, the file open dialog asks the user to specify a network file now. **(8427)**

Dialogs

- ✔ User-defined titles for the signal controller / detector record, which are entered in the signal controller dialog (tab page LDP Config), are now saved upon closing the dialog with OK. **(8554)**

Dynamic Assignment

- ✔ An sporadically occurring crash at the start of a simulation run has been fixed. **(8578)**

File Handling

- ✔ An error causing invalid network files to be written has been fixed. For example opening the node dialog and saving the network file afterwards may have caused invalid network files. Reading such a network file fails with message "The node has both a polygon and link segments". The network file can be fixed with a text editor, removing the text between the tags "linkSegs" (including the tags) from each "node" that has this. **(8575)**

Network editor

- ✔ Cancelling a delete action of several objects with different types works correctly now. (Previously, some objects were deleted anyway.) **(8555)**

Read Additionally

- ✔ The option "Discard duplicates" is now correctly applied to all base data. (Previously, not all duplicates were correctly discarded.) **(8510)**

Signal times table window

- ✔ Displaying PT calling point names in the window now works correctly (without a crash). **(8556)**

6.00-14 [46724]

2014-03-26

+ New Features and Changes

COM Interface

- + Script files can be run from the Vissim main menu (Scripts / Run Script File), e.g. VBS, Javascript or Python scripts. For Python scripts, Python 2.7 needs to be installed on the computer (e.g. python-2.7.6.amd64.msi for the 64 bit edition of Vissim). In addition, a compatible version of pyWin must be installed (e.g. pywin32-218.win-amd64-py2.7.exe). **(6556)**

File Handling

- + The name of the *.err file includes the simulation run number if the file is written during a multi-run simulation series. **(8336)**

Vehicle Simulation

- + A vehicle approaching a destination parking lot with at least two real parking spaces on a one-lane link treats occupied and reserved parking spaces as blocked, so the vehicle can select only an upstream parking space (even if there are more attractive parking spaces downstream but these are not considered accessible). In addition, the vehicle checks each time step if a more attractive parking space has become accessible. If this happens, the vehicle reserves that more attractive space instead. **(8389)**

Visum Export

- + The PT stops and PT lines are exported as well. There is a new option "Only Network" in the export dialog which doesn't export the paths and matrices. **(8468)**

Viswalk

- + Signal controllers can set relative volumes for static pedestrian routes and partial pedestrian routes (route choice method "static"). (This can cause new error messages in networks which contain pedestrian routing decisions / routes with the same number as a vehicle routing decision / route.) **(8476)**

✔ Fixed Bugs

Animation Recording

- ✔ Files of type "For Export (*.ani.txt)" contain correct length and width values for articulated vehicles (multiple model elements) now. **(8480)**

ANM Import

- ✔ Imported detectors are now correctly marked as "from ANM imported" and thus subsequent adaptive ANM imports don't duplicate these detectors anymore. **(8471)**
- ✔ Volumes with empty values in the ANM routes file are now treated as zero (instead of one). (The ANM export from Visum doesn't write zero values to the ANM routes file.) **(8482)**

AVI Recording

- ✔ The preview window works correctly now for networks with SketchUp models. **(8462)**

Dialogs

- ✔ In the color scheme dialog, the selected units for distance and speed from the user preferences are considered for the class limits when a predefined color scheme is applied. **(7956)**

Dynamic Assignment

- ✔ If the node/edge graph cannot be created due to errors, no previously calculated edges are shown anymore. **(8473)**
- ✔ The attribute "capacity" of a parking lot of type "zone connector" is not relevant anymore. **(8430)**
- ✔ The convergence test works correctly now even if the simulation time is not an integer multiple of the dynamic assignment evaluation interval. (Previously, the last complete interval did never show convergence if the very last interval was incomplete.) **(8501)**

Graphics

- ✔ Vissim does not crash anymore upon loading a network file with invalid file paths to MrSID background images. **(8518)**

Network editor

- ✔ No crash anymore upon immediate undo of an insert or duplicate operation while the new object is still highlighted. **(8541)**
- ✔ When a link is split, the value of the attribute "label on/off" is passed to the new link correctly. **(8477)**

Public transport

- ✔ If a partial public transport routing decision is located downstream of a public transport stop on the same link, a PT vehicle following a partial public transport route of that decision doesn't ignore other public transport stops on that route anymore. **(8398)**

Read Additionally

- ✔ Attributes with subattributes (e.g. relative volumes of vehicle routes) are read correctly now. **(8511)**

Signal Control

- ✔ If the channel number of a detector is changed, an entry for this detector in the signal controller / detector record configuration is adapted correctly now. In addition, Vissim doesn't crash anymore if there are invalid entries in the configuration. **(8460)**

Simulation

- ✔ If the network contains broken vehicle routes or PT lines, the simulation does not start and an error message is displayed. (Previously, Vissim sometimes crashed at the start of the simulation or during the run in this case.) **(8374)**
- ✔ Manual actuation of detectors (e.g. through COM) is passed to the signal controller now during a simulation run as well. (Previously, manual actuation had an effect only during a test run.) **(8457)**
- ✔ The Enter key doesn't switch from single-step mode to continuous simulation anymore. The Enter key opens the dialog for a network object which is selected in the network editor, even during a simulation run. (To switch from single-step mode to continuous simulation, F5 can still be used.) **(8449)**
- ✔ The status line can show the current simulation time as time of day again (menu "View / Status Bar / Time"). The number of vehicles in the network is shown again as well. **(8465)**

Viswalk

- ✔ Area measurements result list: Columns for the result attributes "destination volume" and "leave volume" are not skipped anymore if the layout file has been written by a Vissim version before 6.00-13. (The attributes have been renamed to "destination count" and "walk out count" since 6.00-13.) **(8463)**
- ✔ If a partial routing decision of type "service point selection" has no routes, it is ignored, and the simulation doesn't crash anymore. **(8533)**

- ✔ On an escalator/moving walkway with standing location "Right" or "Left", pedestrian jams occurring at high density at the entrance of the escalator/moving walkway are avoided better now. **(8543)**
- ✔ The simulation doesn't crash anymore when multiple PT vehicles stop at the same time and there is a platform edge area without pedestrian routing decision. **(8536)**

6.00-13 [46181]

2014-02-26

+ New Features and Changes

Dialogs

- + The expiration date of the Bing Maps background display is shown in the license dialog. **(8369)**

Graphics

- + For a selected conflict marker (green section of a priority rule), the upstream start of the headway is shown by a triangle now in 2D mode. Drawing of the headway can be switched on and off in the graphic parameters of priority rules. The color of the headway position marker can be configured as well. **(6432)**

Lists

- + The new context menu command "Edit Time Intervals" allows to open the list of the respective time interval type directly from the list window of objects which reference these time intervals, e.g. the list of vehicle input time intervals from the list of vehicle inputs. **(8031)**
- + The number of decimal digits can be set for result attributes with integer values, too. This allows to see decimals for aggregated values (average, standard deviation). **(8260)**

Network Editor

- + The context menu is always related to the object at the click position (or the complete current selection if the click position is on a selected object). If the right click position is outside of the current selection, the selection is changed (as with a left click at that position). **(8142)**

Read Additionally

- + The default settings in the dialog have been improved. The default for conflict avoidance is now "new key on conflict". For base objects, "Discard duplicates" is active by default. This causes the objects which have been read additionally to reference old base data if these are identical with base data in the additional file. If nothing is added because of conflict treatment "Ignore", a warning message is shown. **(8346)**

Simulation

- + The simulation speed is much higher now in networks with many (short) time intervals for evaluations (e.g. queue lengths). **(8356)**

Viswalk

- + Areas have the new attributes "Queue order" and "Queue straightness" which can be used to set a pedestrian class dependent queuing behavior. **(8113)**
- + Pedestrian point objects on areas don't vanish anymore on zoom out if there is enough room on the area. **(8280)**

✔ Fixed Bugs

Animation Recording

- ✔ Recordings of type "For Export (*.ani.txt)" use the specified sections correctly now. (Previously, pedestrians outside of these sections were recorded instead of the pedestrians inside.) **(8411)**

ANM Import

- ✔ If a network is converted from Vissim 5.40, all ANM references are deleted now (and not partially converted anymore). Adaptive ANM import in Vissim 6 is currently not possible with such a network. (Previously, it seemed to work but it did not work correctly.) **(8433)**
- ✔ If the ANM routes data includes an unknown ANM node number, an error message is displayed and Vissim doesn't crash anymore. **(8418)**
- ✔ The selected units (metric / Imperial) are not changed anymore by an initial ANM import. **(8429)**

Dialogs

- ✔ Switching from vertical to horizontal orientation in the 3D signal head dialog does not discard previous settings anymore. **(8284)**

Dynamic Assignment

- ✔ Route closures with more than two links are observed correctly now. **(8434)**

Evaluations

- ✔ In the vehicle record and the vehicle list, all public transport attributes are shown during the full dwell time (else empty values). The current dwell time is incremented continuously. **(5338)**

Graphics

- ✔ Objects with the attribute 'invisible' set in their DisplayType are drawn in 2D mode with dashed border lines only (no fill color). During a simulation run, these objects are now invisible in 2D mode, too. **(8002)**
- ✔ The color scheme for lane segments is now visible in 3D mode, too. **(8423)**

Open network file

- ✔ Reading network files (*.inpx) and converting old network files (*.inp) is much faster now. **(8424)**

Read Additionally

- ✔ The dialog has now sufficient width and it can be resized. **(8347)**

Signal Control

- ✔ Changing the number of a signal group in the GUI of an external controller (including fixed time) doesn't cause a crash in Vissim anymore upon OK in the signal control dialog. **(8432)**
- ✔ Fixed time controllers can be edited correctly now and work fine in a simulation even if a supply file is referenced with an absolute or relative path (which happens if the file has been selected in the file selection dialog, even if this is not visible for the data directory or exe directory in the controller list nor in the signal control dialog). **(8387)**
- ✔ RBC controllers (and possibly others) don't show a runtime error anymore at the start of a simulation if a supply file inside the data directory is referenced with a relative path (which happens if the file has been selected in the file selection dialog, even if this is not visible in the controller list nor in the signal control dialog). **(8415)**
- ✔ The signal times table is refreshed correctly when a new simulation run is started even if the window had been open in a previous simulation run already. **(8364)**

Synchro Import

- ✔ Sequence data and detector data for RBC signal controllers are now correctly imported. **(8381)**

Viswalk

- ✔ A pedestrian routing point is not moved (or deleted) inadvertently anymore after the routing point dialog has been closed. **(8426)**
- ✔ Some inconsistent area measurement results have been fixed: The attributes "Total distance", "Total time gain", "Total delay" and "Total dwell time" include now the total distance / time of a pedestrian between entering and leaving the area, so they are counted in the time interval when one or more pedestrians have left the area measurement. If no pedestrian leaves the measurement in one time interval, the values are empty. Two attributes have been renamed: "Destination volume" is now "Destination count" (because it is an absolute value, not a value per time), and "Leave volume" is now "Walk out count" (because it includes only pedestrians who leave the area by walking but not pedestrians who disappear at their destination). **(8409)**

6.00-12 [45693]

2014-02-06

+ New Features and Changes

Animation

- + Time-dependent display of aggregated values is possible during animation replay. Result attributes for links/areas must have been collected in a previous simulation run, and a color scheme must be selected with a result attribute with the sub-attributes "last completed time interval" and the desired simulation run index in the graphics parameters for links/areas. The results from the time intervals of the selected simulation run are used for coloring during the animation run. **(8321)**

ANM Import

- + Adaptive import is available now. **(7154)**

Graphic Parameters

- + The 3D graphic parameters use the currently selected unit for short distances (m/ft) now. **(8003)**

Graphics

- + Vehicles and pedestrians have now their own selection color which improves the visibility of the selection. **(8259)**

✓ Fixed Bugs

Animation

- ✓ Vissim doesn't crash anymore during animation playback if the option "Color by vehicle state" is activated in the graphic parameters for vehicles. **(8370)**

COM Interface

- ✓ Update packages (service packs) register the new version of Vissim as COM server automatically now. This prevents problems with COM scripts after updates (which could happen easily after extensions of the COM interface). (If early binding is used, the scripts still need to be recompiled.) **(8390)**

Data Model

- ✓ Enhanced adaption of zebra crossings when link geometry is changed. **(8354)**

Dynamic Assignment

- ✓ The cost file is not written anymore if the option "Store costs" is disabled. **(8373)**

Evaluations

- ✓ The format for time intervals, link segments and turning relations in evaluation files exported from lists (*.att) is now the same format as in the list window (instead of a combination of internal code and index which was shown before). **(8056)**

Graphic Parameters

- ✓ The tooltip for the label attribute displays now the long name of the attribute in the current language. **(8261)**

Graphics

- ✓ For the pedestrian 3D models "Ped - Man Biz 01" ... "Ped - Man Biz 04" the color assignment for Vissim colors was corrected: Shirt color references the tie, hair color = hair, trousers color = suit, shoe color = shoes. **(8372)**

Lists

- ✓ Pedestrian / vehicle composition: Adding a new relative flow assigns now an unused type and a desired speed distribution which is already used in the list. Only if all types are already used in the list, an existing type is assigned, with the smallest available composition. **(8301)**

Network Editor

- ✓ If a spline point of a link/connector is moved to an upstream spline point, it stays highlighted now until the mouse button is released. (Previously, a downstream spline point was highlighted instead.) **(8316)**
- ✓ In a floating net editor window some keys were ignored when trying to enter text into the text fields for named layouts and camera positions. Now, all characters can be entered. **(8327)**

Viswalk

- ✓ If there is no pedestrian routing decision on a platform edge area, alighting passengers are removed from the network without causing a crash, and the PT vehicle can leave the PT stop normally. **(8355)**
- ✓ When a PT vehicle is waiting at a PT stop, pedestrians now always walk towards a waiting area before approaching the PT vehicle. **(8342)**

+ New Features and Changes

Graphics

- + Background images are displayed completely (but transparent) during dragging and scaling. **(8338)**

Viswalk

- + There are 2 new result attributes for area measurements:
Leave volume: The number of pedestrians who have left the section(s) of the area measurement. Pedestrians who leave the level via a ramp are included. Pedestrians who board a PT vehicle are not included.
Destination volume: The number of pedestrians who have been removed from the simulation run inside a section of the area measurement, either on their destination area or by boarding a PT vehicle.
The attribute "Source volume" (which had collected pedestrians inserted by inputs as well as pedestrians which had walked onto a section of the area measurement) has been removed. **(8204)**

✔ Fixed Bugs

ANM Import

- ✔ Created static routing decisions affect only the specified vehicle classes now. (Previously, the flag "all vehicle types" was always set.) **(8350)**

Data Model

- ✔ Deleting a distribution (power, weight or occupancy) which is not relevant to a particular vehicle type now only removes the reference to it in the affected vehicle type. **(7580)**
- ✔ The length of pavement markings of type "Zebra Crossing" is adapted correctly now when a link is shortened so that the complete zebra crossing doesn't have enough room anymore. **(8329)**

Dynamic Assignment

- ✔ If the last segment of a link has zero length (because the last spline point has somehow the exact same coordinates as the end point) and if the link ends inside a node, turning relations including that link are now found anyway. **(8310)**
- ✔ Path attributes length and static costs are now calculated correctly for detours. **(8252)**
- ✔ Vehicle class specific closures of connectors are now effective for the path search. **(8322)**

Evaluations

- ✔ The green time distribution evaluation collects for TRENDS controllers the correct signal run times now. (Previously, the run time of the previous signal state was collected for the current signal state. If red/amber is included, this means that red/amber times was collected instead of green times, and if amber is included, amber times were collected instead of red times.) **(8326)**

File Handling

- ✔ The name of the error file *.err is now set correctly when a network file is opened. **(8302)**

Graphics

- ✔ Display types are used for sections if the respective flag is set in the graphics parameters for sections. **(8014)**
- ✔ Textures are now displayed correctly on links with a display type which has not set the "Curved" option. (This problem occurred only on links with large world coordinates.) **(8319)**
- ✔ The state of signal heads was occasionally not displayed correctly in 3D mode in the network editor. This problem has been fixed. **(8332)**

Menu

- ✔ Most recently used files: Correctly translated error message if the selected file doesn't exist anymore, and that file is removed from the list. **(8275)**

Signal Control

- ✔ Vissim doesn't crash anymore at the start of a simulation run if a signal controller / detector record configuration contains objects which can have values which have more than 9 characters (e.g. a negative number with 9 digits or a positive number with 10 digits - these limits are defined in the *.wtt file of the controller). Now, up to 11 characters are possible, so the full range of integer values between -2^{31} and 2^{31} can be used. **(8349)**

Viswalk

- ✔ The simulation run doesn't crash anymore when a pedestrian is pushed back from an escalator due to high pedestrian density. **(8293)**

6.00-10 [45224]

2014-01-22

+ New Features and Changes

COM Interface

- + New method `Net.Pedestrians.RemovePedestrian`: removes the specified pedestrian from the network. **(7909)**

Dialogs

- + The confirmation dialog for required adaptations (e.g. "All evaluation results of the simulation run will be deleted" when you delete a simulation run) contains the option "Do this for all messages" now. **(7890)**

Graphics

- + Anisotropic filtering for textures is now enabled for textures if the graphics hardware supports this feature. Anisotropic filtering can be (de)activated manually per background image and display type. **(8202)**
- + Keyframes and camera positions can now be edited during a simulation run. **(8170)**
- + The 2D visualization of small networks during a simulation run is up to 50% faster. **(8263)**

Network Editor

- + Spline points of links and connectors can now be edited even if the link is very narrow (zoomed out). The start and end points of a selected link are always visible (in link insert mode) and can be moved. Spline points which overlap with start/end points or other spline points are displayed darkened and cannot be moved. **(8126)**
- + When a new connector is created, the values of the link attributes Link behavior type, Display type, Thickness, Gradient, Show classified values and Show individual vehicles as well as the lane attributes Blocked vehicle classes and No lane change are copied from the destination link. **(8208)**

✔ Fixed Bugs

Animation recording

- ✔ Recording of AVI files during replay of an animation recording now works correctly (even if the option "Show preview" is activated for any of the storyboards to record). **(8324)**

ANM Import

- ✔ The following problem on converting the ANM coordinates has been fixed:
Occasionally some part of the network was not correctly converted, which caused some far too long connector links. **(8318)**

COM Interface

- ✔ A PT vehicle cannot be deleted anymore during the dwell time in a stop for real pedestrians. (Previously, this caused a crash.) **(8248)**

Dialogs

- ✔ The 3D model selection dialog doesn't show a default "box" model segment anymore for a new model. **(8047)**
- ✔ The detector dialog can be closed with OK now even during a simulation run without causing an exception message. **(8282)**

Dynamic Assignment

- ✔ A path file with detours (found with active option "Avoid long detours") is read correctly now (e.g. at the start of a simulation run). (Previously, during the simulation, there were only the detours available but not any normal paths.) **(8276)**

Graphics

- ✔ After the first switch from 2D to 3D the network is displayed in an oblique view automatically (instead of showing only sky). **(8063)**
- ✔ Deformed drawing of some DWG files as background images has been fixed. **(7927)**

- ✔ In 3D mode the graphics parameter "Use color scheme" is applied correctly for ramps and stairs. (Previously, all ramps had been drawn with the display type color.) **(8309)**

Lists

- ✔ The attribute "Link evaluation segment" (short "LinkEvalSegment") in the result list for link segments is now displayed using the currently selected unit (metric/Imperial) for long distance. (Previously, the link coordinates were always shown in meters.) **(8237)**

Menu

- ✔ The submenu for multiple Undo/Redo has been removed temporarily in order to boost performance of multiple attribute value changes, which is especially notable through the COM interface. **(8273)**

Network Editor

- ✔ Duplicating a pedestrian ramp and changing its type to escalator and changing its width does not result in a simulation crash anymore. **(8254)**
- ✔ No crash anymore after inserting a vehicle route and subsequently deleting the inserted route with the 'Del' key. **(8253)**
- ✔ The width of an area created as platform edge from the context menu of a PT stop ("Add platform edge left" / "... right") is now constant 2 meters (instead of the width of the link). **(8065)**

Presentation

- ✔ Vissim doesn't seem to hang anymore (Windows message "PTV Vision Traffic & Pedestrian Simulation does not respond") at the end of a video recording (when the temporary *.avi file is written to a network drive). **(8291)**

Signal Control

- ✔ If the GUI DLL of an external controller tells Vissim to delete a signal groups and then to create that signal group again, Vissim doesn't delete the associated signal heads anymore. **(8292)**

Viswalk

- ✔ Graphics: If grid display is enabled, the 3D visualization now shows color-coded values per area/ramp. (Previously, in 3D only static colors were shown.) **(8258)**
- ✔ The parameter "Noise" for the walking behavior of pedestrians is applied correctly now. **(8206)**

6.00-09 [44649]

2013-12-13

+ New Features and Changes

Animation recording

- + Using the animation recording it is possible to record a simulation run and replay it later, similar to a video recording. The replay is only a visualization (without the calculation of the vehicle/pedestrian interaction) and therefore much faster than a simulation.

In order to record animations following steps are required:

1. Create animation recording

The list window of recording objects can be opened via main menu Presentation - Animation Recordings. Here you can create animation recordings of type "For Replay (*.ani)". For each animation recording it is possible to assign one or multiple sections (polygons or rectangles in the network where vehicle/pedestrian positions are recorded). After a mouse click in a cell in the column "Sections" in the list window (add the column through the attribute selection dialog if it is not yet displayed) all defined sections are shown and can be selected for the recording. If no sections are selected for a recording the complete network is recorded. It is possible to define several animation recordings with different times. The animation recordings and their attributes are stored in the network file.

2. Activate animation recording

The recording of animations is activated via the main menu Presentation - Record Animations. Individual animation recordings can be excluded by resetting their attribute "Record Animation" (short "RecAnim").

3. Start a simulation run

*.ani files are created for all active animation recordings.

Replay of an animation recording can be started via the main menu - Presentation - Continuous/Single Step or via context menu "Start animation file replay" in the animation recordings list. **(6559)**

ANM Import

- + If a projection is defined in the ANM file, it is considered on import: ANM coordinates are converted from the given projection to cartesian coordinates. If no projection is given in the ANM file, then the coordinates are assumed to be cartesian already. **(8088)**

Data Model

- + Pedestrians: New attributes Shirt color, Hair color, Trousers color and Shoe color. These attributes can be changed also during a simulation run. **(8177)**
- + Signal heads: The attribute "DesSpeed" is renamed to "vAmberBlock". This attribute is relevant for block signals only. **(8135)**
- + The network object "Measurement Area" is renamed to "Section" as it is used in a more generalized way. Sections are used for the area measurements (as before), and additionally for animation recordings. **(8199)**
- + Vehicles: The attributes "Desired speed fractile", "Occupancy", "Vehicle type" and "Weight" can be changed during a simulation run now. **(7848)**

Lists

- + Copying list data to the clipboard by using the toolbar command "Copy to Clipboard" uses "Tab" as a separator now. Hence inserting data in Excel works correctly now. **(8207)**

✓ Fixed Bugs

Data Model

- ✓ Deleting segment nodes does not cause the program to crash anymore. **(8228)**

Dialogs

- ✓ User preferences (Graphics): Settings for video compression for AVI recording are now correctly saved and restored. **(8214)**

Dynamic Assignment

- ✓ The path length in the path list is now correct for imperial units also. Previously Vissim crashed upon opening the path list with a path collection containing detours. **(8244)**

Graphics

- ✓ AVI and animation recording work correctly now in combination with several simulation runs. **(8233)**
- ✓ AVI recording: If a named network editor layout is referenced in a storyboard it is now applied during AVI recording. **(8227)**

Network Editor

- ✓ Splitting a link before a PT stop does not inactivate the PT line stop anymore. PT line stops are now correctly adjusted. **(8162)**

Signal Control

- ✓ Error messages from VAP controllers (file with extension *.dll.err) contain the correct reference to the affected signal control now. **(8232)**
- ✓ The error file of VAP controllers is written to the same directory as the *.inpx file now (not to the Vissim program directory anymore). **(8079)**

Viswalk

- ✓ The level height of a PT stop is now applied correctly to pedestrians alighting at that PT stop. **(8176)**

6.00-08 [44447]

2013-12-03

+ New Features and Changes

Network Editor

- + As long as an object on a link is dragged only inside the same link, it is not moved to an overlapping different link (unless the Tab key is pressed). **(8046)**

- ⊕ The status of a selected conflict area (or multiple selected conflict areas) can be toggled with (Ctrl+) right click (i.e. without context menu) if the insert mode for conflict areas is active. The context menu allows to set a specific status (different from the current one) even if not in insert mode. **(8018)**

Vehicle Simulation

- ⊕ A temporary stop inside a red crossing conflict can be accepted to avoid a collision. If vehicle A sees that vehicle B will leave a downstream conflict area soon, vehicle A can now wait until vehicle B has left the conflict area, even if vehicle A is already inside another upstream crossing conflict area (where vehicle A has no priority). **(8171)**

✓ Fixed Bugs

Dialogs

- ✓ Driving Behavior: The Wiedemann 99 parameters CC0, CC2, CC7, CC8 and CC9 are converted correctly between Imperial and metric units. **(8203)**
- ✓ Signal Controller: The dialog can now be opened while a simulation is running. **(8225)**

Installation

- ✓ The following problems after two subsequent /SILENT setups (into different directories, with different start menu group names) have been fixed:
 - 1) The start menu item of the first installation was deleted by the second setup.
 - 2) The first installation did not show up anymore under "installed programs" in the Windows Control Panel. **(8159)**

Network Editor

- ✓ A new intermediate point on a link/connector generated through the context menu command does not change the existing curvature any more. The new point is always located on the center line of the link rather than directly at the mouse click position. **(8158)**

Test Mode

- ✓ Pressing the space bar allows to pause a continuous test run. **(8160)**

Vehicle Simulation

- ✓ A downhill gradient of a link/connector may cause a positive maximum deceleration value for vehicles travelling on it due to the influence of the gradient on deceleration capabilities. This may happen e.g. with a user-defined max. deceleration function with values close to 0 or if the option "Use gradient from z-coordinates" is active and the z-coordinates of two subsequent links are too different. These events are now logged in the *.err file. (Previously, it could cause an exception message which ended the simulation run.) **(8187)**
- ✓ Conflict Areas: If a prioritized vehicle A must wait at a red signal, the yielding vehicle B (e.g. now on a protected left turn) can now pass the conflict area even if vehicle A plans to change lanes because of an upcoming necessary lane change. Previously, vehicle B did not enter the conflict area in this situation. **(8218)**
- ✓ Partial PT routing decisions can affect vehicles on partial PT routes again. (This had not worked since Vissim 6.00-06.) **(8217)**

Viswalk

- ✓ An intermediate point of a pedestrian route can be placed on a ramp again. (Only in version 6.00-07, this was not possible and could cause a crash.) **(8215)**
- ✓ Pedestrians that pass the area closely before a start or end of a ramp, but are not routed over the ramp, are now seen also by pedestrians on the ramp (that are about to cross the same area) and vice versa. Previously, passing pedestrians were seen by those that walked off the ramp only as soon as they left the ramp - hence bumping into any walking or standing pedestrians off the ramp end. **(7961)**

6.00-07 [44239]

2013-11-19

⊕ New Features and Changes

2D Visualization

- + The turn indicator of a vehicle shows the first "right" or "left" direction from the following list:
 - 1) Current lane change direction
 - 2) Desired lane change direction
 - 3) Desired direction of the current connector (new!)
 - 4) Desired direction of the next connector of the route which has "right" or "left" (if inside lane change distance)
 - 5) Turn indicator direction as set by the DriverModel.DLL **(8146)**

3D Visualization

- + Background image textures are not compressed by default anymore to speed up loading time. Texture compression may be switched back on via user preferences menu if the video memory capacity is exceeded. **(7882)**

COM Interface

- + New method ISignalController.GetSCDetRecResult to access the SC/Detector record results (which can have been sent from the signal controller DLL). Attention: In VBA, the integer parameter "retValue" which is passed by reference, needs to be defined as type "Long". **(7126)**

Data Model

- + If the start or end of a connector is moved to a different lane (e.g. in the network editor, in the connector dialog, in a list window, in the quick view sidebar or through COM), the spline of the connector is recalculated. **(7626)**

Lists

- + Open list windows reduce the simulation speed not as much anymore. **(8134)**

Fixed Bugs

3D Visualization

- ✓ If "use color scheme" is active in the graphic parameters, vehicle and pedestrian models from model files are now displayed using a color from the color scheme. **(8114)**
- ✓ Timers for remaining green / red time on pedestrian 3D traffic signals are now displayed correctly during simulation. **(8140)**

COM Interface

- ✓ No crash anymore upon starting Vissim with the command line parameter '-automation' when the OpenStreetMap license terms have not been accepted yet. **(8156)**

Data Model

- ✓ If a network object on a link or lane is moved to a link which is shorter than the previous link coordinate, the link coordinate is adapted correctly to the new link's length now. **(8131)**

Demo Version / Vissim Viewer

- ✓ VDiagGUI.exe works now for these versions, too. **(8147)**

Dialogs

- ✓ Driving Behavior: Changing the attributes "Deceleration rediction distance (own)" and "Deceleration rediction distance (trailing vehicle)" works correctly now, even if the units for short distance and acceleration are not both set to metric or Imperial but mixed. Changing the attributes "Lateral minimum distance at 0 km/h" and "... at 50 km/h" works correctly now in metric and Imperial units. **(8127)**

Evaluations

- ✓ Convergence evaluation files contain data now. **(8124)**
- ✓ If the directory containing the evaluation directory doesn't exist, Vissim crashes at the start of a simulation run if the green time evaluation (*.lzv) is activated. **(8150)**

Lists

- ✓ Ctrl+C and Ctrl+V behave as expected now in text cells in edit mode when only a part of the text is selected or none at all. **(8043)**
- ✓ Shift+Space doesn't select the whole row anymore when pressed during edit mode in a text cell but adds a space character (as without Shift). **(8074)**

Network Editor

- ✔ Vissim does not crash anymore if no network editor is currently open and a new network editor window is opened via the context menu in the smart map. **(8129)**

Signal Control

- ✔ The following bugs have been fixed:
 - All rows in the SC/Det. record window are cut off after 39 characters.
 - The data rows in the *.ldp file contain only "??" (or other random characters).
 - An active SC/Det. Record evaluation can even cause Vissim to crash, especially if the SC/Det. configuration of a controller is empty. **(8119)**
- ✔ The function "Start optimization" for a single controller has been moved from the signal controller dialog (where it caused a crash) to the context menu of the signal controller list window. **(8123)**

Viswalk

- ✔ Objects on pedestrian areas cannot be created anymore on invisible areas in the network editor. **(8125)**
- ✔ The pedestrian simulation is now reproducible, even with multiple cores. (Previously, small differences could appear due to a bug in a third-party DLL which could add up to a bigger difference after a long simulation run.) **(7355)**

6.00-06 [44095]

2013-11-11

+ New Features and Changes

3D Visualization

- + Export to 3ds Max is now available (as an add-on module). **(7368)**
- + If a laptop has Nvidia Optimus graphics, Vissim tries to activate the discrete (high performance) graphics adapter automatically. **(8082)**

Data Model

- + Links have the new relations to static and partial vehicle routes, partial PT routes, parking routes, vehicle route closures and managed lanes routes. If one of these relations is selected for the coupled list in the links list window, all routes of that type which pass the selected link(s) are shown in the child list (on the right side). **(6609)**
- + Vehicle- and Pedestrian Compositions: The attributes vehicle resp. pedestrian type, desired speed distribution and relative flow can be changed during the simulation now. **(8067)**

Network Editor

- + Background maps / aerials from Bing (requires an active maintenance contract) or OpenStreetMap can be used with an Internet connection. The background map display can be activated with the Earth icon in the network editor toolbar or in the basic graphic parameters of the network editor where the map provider and additional parameters (black/white, color intensity) can be selected as well. **(7790)**

VisVAP

- + VisVAP filenames (*.vv) may contain also blanks and dashes because since Vissim 6 this is possible for VAP files (except at the beginning of the filename). The filename still needs to start with a letter since it is used as program title of the generated VAP file as well. For the program title, blanks and dashes are replaced automatically by underscores during VAP code generation.
The program title of the generated VAP code is truncated to 32 characters even if the filename is longer.
The check for a valid VisVAP file name is done now already during check of the flow chart. Hence no empty file is written in case of error. **(8118)**

Viswalk

- + Pedestrian route locations are displayed as squares in the network editor if they use dynamic potential. **(7924)**

✔ Fixed Bugs

3D visualization

- ✔ Static 3D models with a file suffix other than .v3d are drawn at the correct location with the correct orientation now. If the network was built in Vissim 6 such 3D models must be rotated by 180 degrees in some cases. **(7964)**
- ✔ The lane marking "continuous line" is now displayed at the correct position in 3D, too, if "no lane change" is active for specific vehicle types. **(8070)**

- ✔ The quality of network rendering in 3D is independent from the use of a sky texture now. The network is not displayed anymore on a very small plane if zoomed out. New option to hide the ground plane in the 3D graphic parameters. **(7600)**

COM Interface

- ✔ PT vehicles added by `VehicleContainer.AddVehicleToPtLine()` follow the PT line route now. **(8109)**

Data Model

- ✔ The following bug has been fixed: Vehicle compositions: If there is already a relative volume assigned to a certain desired speed distribution for each vehicle type, new relative volumes for other combinations cannot be added anymore. **(8075)**

Dialogs

- ✔ The (link/connector) spline point dialog now displays the correct unit (m/ft) according to the network settings. **(8117)**

Dongle Protection

- ✔ If the dongle connection is lost temporarily, a simulation run can continue now after the connection is restored. Vissim tries to restore the connection automatically and displays an action bar dialog during this time with the option to cancel this process. Upon click of Cancel Vissim is closed but in the case of changes in the network, it still can be saved.
If the dongle connection is lost for a longer time, the automatic protection of the `lfzuf14N.dll` can kick in and display a dialog with the options "Ignore", "Retry" and "Cancel". After the connection is restored, the user must select "Retry". "Ignore" can only be used three times, and "Cancel" closes Vissim. **(8081)**

Dynamic Assignment

- ✔ No crash anymore after a vehicle with a route guidance path gets a new path at a dynamic routing decision. **(8115)**
- ✔ No crash anymore in a simulation run with active route guidance system and multiple processor cores. **(8116)**
- ✔ Paths generated by ANM import or Visum assignment are now displayed correctly in Vissim right after the import respectively assignment. (Previously it was necessary to re-load the network file.) **(7767)**

Evaluations

- ✔ The SSAM trajectory file (*.trj) has the correct format now. **(8022)**

Graphics

- ✔ Lane markings are in 3D mode at the same position as in 2D. **(7831)**

Lists

- ✔ Loading a network file while a conflict area list with deactivated option "show passive conflict areas" is open does not cause the program to crash anymore. **(8069)**
- ✔ Time interval list: The original list layout is now restored when loading a *.layx file. Defining a named list layout doesn't cause a crash anymore. (The type of the displayed intervals, e.g. "vehicle routes (static)", is still not saved in the *.layx file.) **(7237)**

Network Editor

- ✔ A spline point can be added to a selected connector immediately through `Ctrl + Right-click` (as to a normal link). **(8101)**
- ✔ No sporadic crashes anymore during the editing of links with conflict areas (including passive ones) when the undo stack is full (i.e. after at least 20 edit operations with the default value in the user preferences). (This problem happened only in version 6.00-05.) **(8128)**
- ✔ The selection color from the graphic parameters is used for static 3D models now as well. The attribute `ShowLabel` is by default true now for 3D signals read from an *.inp file or added to the network. **(8105)**

Open network file

- ✔ The error messages about too long zebra crossings now also include the number of the link where the resp. zebra crossing is located. **(8064)**

Signal Control

- ✔ No crash anymore upon opening the signal controller GUI for a controller with signal heads inside a node which is not activated for evaluation but only for dynamic assignment. **(8092)**

- ✔ The second initialization of controllers of the type "External" at the start of a simulation run has been removed. **(8084)**
- ✔ Vissim doesn't crash anymore after a syntax error in a VAP supply file (*.vap or *.pua) has been reported. **(8071)**

Vehicle Simulation

- ✔ Partial PT routes are used by PT vehicles which haven't yet passed the destination section of their PT line only if the destination section of the route is on the PT line link sequence. **(8090)**
- ✔ The desired direction (if left or right) of the next connector of the route of a vehicle is now visualized from the lane change distance (and not only from the emergency stop distance) and affects the overtaking on the same lane ("consider next turning direction") from there. **(8112)**
- ✔ The following bug has been fixed: If a partial PT route is passed multiple times by a PT line, the PT vehicle of this line continues its trip after the destination section of the partial PT route always with the first loop of the original PT line link sequence, i.e. it ignores in all subsequent loops that the original link sequence continues somewhere else. **(8091)**

6.00-05 [43717]

2013-10-15

+ New Features and Changes

Data Model

- + Many more link attributes can be changed during a simulation run now: BlockedVehClassesDynAssign, CostPerKm, DisplayType, EmergStopDist, LnChangeDist, LnChangePerLane, OnlyOvtBus, Surch1, Surch2, Thickness, Lane.BlockedVehClasses is always editable now, too. **(7849)**
- + New attributes (read-only) for detectors:
 - GapTm: Gap time
 - Occup: Occupancy
 - OccupRate: Occupancy rate
 - VehNo: Vehicle number
 - VehLen: Vehicle length
 - VehSpeed: Vehicle speed
- New attribute/relation for signal controller:
 - CycSec: Cycle second (read-only)
 - Detectors: Detectors (relation) **(7108)**
- + PT line stops: The attributes alighting percentage and dwelltime distribution can be changed during the simulation now. **(7119)**

Network editor

- + Labels can be moved during the simulation now. **(7970)**

Viswalk

- + CAD import of pedestrian areas (and obstacles) is available now. **(7367)**

✔ Fixed Bugs

Demo Version

- ✔ A simulation run can be started now even if no network file was loaded but the network was created from scratch. **(8052)**

Dialogs

- ✔ Vehicle type: Changing the color distribution for Color 1 is now applied correctly. **(7976)**

Dynamic Assignment

- ✔ Crash upon simulation start with active option "Reject paths with total cost higher by..." is fixed. **(8021)**
- ✔ The following bug has been fixed: A vehicle with a real parking lot as its destination can stop before reaching the parking space if the internal parking space decision (which is created automatically at the start of the simulation run) is on a multi-lane link with a subsequent connector connecting not from all lanes on the original path of the vehicle (which might be changed through the parking space decision). **(8093)**

- ✔ Vissim doesn't crash anymore at the end of a simulation run with active route guidance if the simulation period is a multiple of the evaluation interval for dynamic assignment. **(7952)**

Evaluation

- ✔ The vehicle and pedestrian record are now restricted to the time periods as defined in the evaluation configuration. **(7999)**

File I/O

- ✔ The conversion of large *.inp files from Vissim 5.40 with many conflict areas is much faster now. **(8007)**

Lists

- ✔ Lists with many objects are opened much faster now. **(8048)**

Signal Control

- ✔ Deleting a signal controller works again now. **(8000)**
- ✔ Entries in the signal times table and SC / detector record window configuration are now read correctly from old *.szp/*.kfg files. This did not work for entries referencing a code from a *.wtt file. **(7969)**
- ✔ Fixed time control supply files are passed correctly to the GUI DLL even if they have an absolute path. **(8044)**
- ✔ Vissim doesn't crash anymore upon the first signal controller time step if there is the state of a public transport calling point listed in a signal control / detector record. **(8061)**

Signal times table window

- ✔ Dragging the mouse to show a time duration works now. **(7981)**

Start of Program

- ✔ The error message "CodeMeter connection lost" doesn't appear anymore at the start of Vissim. **(8017)**

Test Mode

- ✔ Macro files (*.m_i) written by Vissim 5.40 or earlier can be read now. **(7979)**

Vehicle Simulation

- ✔ A crash during the simulation with a parking lot routing decision which has a time interval without parking rate and parking duration is now fixed. **(8020)**
- ✔ The simulation run is reproducible now even if a vehicle sees a signal head when inserted on a link (from a vehicle input, a parking lot or a PT line). **(7948)**

Viswalk

- ✔ The classified display of pedestrian grid cell data now also works on Windows Vista. **(8001)**
- ✔ The walking pedestrians on moving walkways and escalators are restricted correctly to the selected pedestrian classes in the simulation now. **(7974)**

6.00-04 [43441]

2013-09-19

+ New Features and Changes

COM Interface

- + New attributes (read-only) for Simulation:
SimSec: current simulation second.
SimTmOfDay: current simulation time of day (simulation second 0 = start time). **(7894)**

- + New COM methods for vehicles:
 - Net.Vehicles.AddVehicleInZone: Places a new vehicle in the specified zone.
 - Net.Vehicles.AddVehicleInParkingLot: Places a new vehicle in the specified parking lot.
 - Net.Vehicles.AddVehicleAtLinkCoordinate: Places a new vehicle on the specified link, lane and coordinate.
 - Net.Vehicles.AddVehicleToPTLine: Places a new PT vehicle in the specified PT line.
 - Net.Vehicles.RemoveVehicle: Removes the given vehicle from the network.
 - Net.Vehicles.GetArrived: Returns vehicles that have reached their destination parking lot in the last simulation step.
 - Net.Vehicles.GetParked: Returns vehicles that are parked in parking lots.
 - Net.Vehicles.GetDeparted: Returns vehicles that have left a parking lot in the last simulation step.
 - Vehicle.MoveToLinkCoordinate: Places a vehicle, that currently is in network, on the specified link, lane and coordinate. **(7269)**

Graphics

- + When inserting a background image file into Vissim including details to position and size of the image, this information can optionally be considered during import. This information can be included e.g. in CAD and BGR files. **(7880)**

Fixed Bugs

Evaluation

- ✓ Moving labels does not cause the evaluation results to be discarded anymore. **(7934)**
- ✓ The link results (when collected per link segment) are now correctly loaded and displayed after reading a network with result. **(7954)**

Graphics

- ✓ Graphic artifacts do not appear anymore on 3D net editor view when dragging a splitterbar onto this view. **(7783)**

Open network file

- ✓ Vissim does not excessively allocate memory on reading a network with lots of detectors. **(7958)**

Signal controller dialog

- ✓ Vissim does not crash anymore on inserting new signal controllers and signalgroups. **(7963)**

Simulation

- ✓ If the status line is updated again in single step mode after a time step has been completed, it shows correctly the current simulation time between the two time steps now (and does not show the end of the next time step anymore). The same problem has been fixed for the attribute simulation second in the vehicle list and pedestrian list. COM access to the simulation time between time steps works correctly now, too. The simulation resolution can now be changed only at full simulation seconds. **(7903)**
- ✓ The simulation speed in networks containing many PT calling points is now much higher. **(7925)**

Viswalk

- ✓ Pedestrians who start and finish a travel time measurement in the same time step are always correctly measured. **(7942)**

6.00-03 [43343]

2013-09-13

+ New Features and Changes

3D Visualization

- + References to obsolete 3D model filenames (e.g. 911.v3d) are replaced automatically by the new systematic filenames of the same models (e.g. "Car - Porsche 911 (198x).v3d"). **(7870)**

COM Interface

- + New attributes (read-only) for dynamic assignment:
 ConvCondMet: True if all active convergence conditions are met.
 ConvgTravTmEdgDiffMax: Current maximum percentage difference between old and new edge travel times [%].
 ConvgTravTmPathsDiffMax: Current maximum percentage difference between old and new path travel times [%].
 ConvgVolEdgDiffMax: Current maximum absolute difference between old and new edge volumes (NOT percentage!).
(7124)
- + New COM methods "ReadChannel" and "WriteChannel" for signal controllers to read/write data from/to the given SC communication channel (from the previous / for the next controller time step). **(7261)**

Data Model

- + Almost all driving behavior parameters can now be changed during the simulation, except the safety distance reduction factor distances for signals (SafDistFactSigStart, SafDistFactSigEnd). **(7117)**
- + Vehicle types now have three more (optional) links to color distributions (which are used for specific parts of the vehicle model as defined in the *.v3d file). Each single vehicle based on a 3D model now supports in 3D mode up to 4 colors that are determined by Vissim.
 For vehicles with category "Pedestrian" now the same 3d model files are used as for pedestrians (those models support 4 different colors determined by Vissim). When reading a network file of a previous Vissim version such vehicles may be colored differently. In this case the desired color distributions need to be selected for the newly introduced colors of the vehicle type. **(7886)**

Evaluation

- + The automatic queue counters for the node evaluation now also consider conflict areas (where vehicles must yield), in addition to signal heads and priority rules, for their position (first stop line inside the node). **(4141)**

Fixed Bugs

2D Visualization

- ✔ Indirect attributes (of objects accessed through relations) and evaluation attributes are now displayed as label when no simulation is running, too. **(7887)**
- ✔ The number of decimals for labels as defined in the graphics parameters is now applied correctly. **(7879)**

COM Interface

- ✔ The attribute ContrByCOM of signal groups can now be set to false, too (previously, the attribute was always set to true). **(7884)**

Dialogs

- ✔ Priority Rule dialog: Incorrect handling of the stop line position if the length unit is set to feet has been fixed. **(7940)**

Graphics

- ✔ A crash upon reading a layout file (*.layx) with floating list windows is fixed. **(7897)**

Lists

- ✔ Editing of departure times of PT lines or boarding volumes of PT stops or start times of keyframes doesn't cause incorrect behavior during a subsequent simulation run anymore. **(7923)**

Network editor

- ✔ The context menu item "Show in List" for vehicle and pedestrian routes works now. **(7931)**
- ✔ Deactivating the selectability of a level now correctly prevents the selection of backgrounds belonging to that level. **(7872)**
- ✔ The name of the Quick View window does not change anymore after reading of a layout file (in previous versions the name was wrongly set to List). **(7929)**

Open network file

- ✔ A crash upon reading an *.inp or *.inpx file which contains invalid data (e.g. a reduced speed area past the link length) is now fixed. **(7888)**

Read additionally

- ✔ When a connector is read additionally to an existing link, the operation is canceled if the link does not contain enough lanes. Previously, this resulted in a crash. **(7933)**

Rotate/Translate Network

- ✔ Camera positions are now adjusted, too. **(7865)**

Signal Control

- ✔ The trace file written by a VAP controller doesn't have a random filename anymore (including special characters which could cause a crash of the controller). **(7926)**

Signalization

- ✔ If there is no user-defined configuration for the signal times table, the new signal controller attribute "Signal times table auto-configuration" is set automatically. As long as this attribute is set, the signal times table configuration contains all signal groups and then all detectors of the controller (as in Vissim 5.40) and it cannot be modified. **(7759)**

Simulation

- ✔ The simulation stops now reliably when the defined simulation period is reached. (In previous versions the simulation could run past the simulation period in some cases: with single steps executed from COM scripts and in Vissim in single step mode if the space key was pressed.) **(7837)**
- ✔ Warning messages about incomplete vehicle inputs are written to the *.err file again. (Previously, these warnings were shown in the messages window instead.) **(7921)**

6.00-02 [42872]

2013-08-14

+ New Features and Changes

3D Visualization

- + Faulty graphics drivers for the integrated graphics (HD4x00) of the 4th generation of Intel Core i CPUs don't crash anymore upon initialization of OpenGL (while Vissim displays the startup splash screen). Texture compression is now automatically deactivated for Vissim on this hardware. **(7854)**
- + Improved rendering for networks far away from origin. (Better rendering performance in 3D mode when zoomed in.) **(7439)**

External Driver Model

- + The DriverModel.DLL interface is available now for Vissim 6. The example project has been updated to Visual Studio 2010. **(6496)**

Network Editor

- + After adding a 3D traffic signal through the context menu of a signal head, the dialog for editing the 3D signal opens now automatically after the selection of the mast/arm. **(7666)**

Parking Lots

- + New calculated attributes:
Current Occupancy: Number of vehicles currently in the parking lot. This value is independent of the remaining demand. For abstract parking lots, the value is determined from the initial occupancy, incremented (decremented) for each vehicle arriving in (departing from) the parking lot. For zone connectors, the value is empty (unlimited capacity, no initial occupancy).
Remaining Demand: Number of vehicles (from matrices and trip chain files) waiting for their departure time (only in abstract parking lots and zone connectors - empty value for real parking spaces). (This value can be higher than the current occupancy if vehicles from a matrix file have not yet completed their previous trips with this parking lot as destination.)
Parking Availability: Relative number of free parking spaces, defined as ratio of the absolute number of free spaces divided by the highest number of free spaces in any destination parking lot in the same zone. These values are calculated only when a vehicle selects a destination parking lot from that zone (at departure from the origin parking lot or at a dynamic routing decision or when a route guidance system acts) and stay unchanged (even if vehicles leave/enter that parking lot) until this happens again. For zone connectors, the value is always 1.0. **(7874)**

Simulation

- + Improved simulation speed, especially with activated 2D visualization on recent processors (Intel Core i family). **(7735)**

✔ Fixed Bugs

ANM Import

- ✔ Vissim doesn't crash anymore upon import of a crosswalk over a channelized turn without ANM lane turn (e.g. exported from Vistro). If there is no lane turn available on a channelized turn, then no crosswalk is generated and a warning is written to the message window. **(7846)**
- ✔ Vissim PT lines and line stops now include all PT stop bays on the route, even if several ANM PT stop bays are defined for one link. (The previous version considered only the very first stop bay per link). **(7855)**

COM Interface

- ✔ Colors in 2D screenshots are now correct. (The output was BGR where it should be RGB.) **(7838)**

Dialogs

- ✔ The dialog for desired speed distributions now considers the settings for the units (mph). [In previous versions values were always shown in km/h, and all entered values were interpreted as km/h.] **(7863)**

Graphics

- ✔ Preview windows are now automatically closed when AVI recording ends. **(7704)**

Language

- ✔ If the Vissim license doesn't include English, parts of the user interface (e.g. the network object sidebar) were displayed in English anyway, and it was not possible to set a language in the User Preferences dialog. This bug has been fixed. **(7862)**

Read Additionally

- ✔ Additional reading of *.inpx files is no longer aborted if mandatory references cannot be resolved. Now, objects with such references are simply skipped. **(7851)**
- ✔ Vissim crashed when overwriting pedestrian inputs during additional reading of *.inpx files. This bug has been fixed. **(7852)**

Signal Control

- ✔ Block signalization is now completely supported. **(7750)**
- ✔ When reading an *.inpx file, the signal time table and SC/detector record configuration read the port numbers for detector entries correctly now. [Previously, the controller number was used instead, and after the *.inpx file was saved again, the port numbers in the configuration were corrupted.] **(7871)**

Simulation

- ✔ The simulation is now reproducible even if there is a stop sign with a vehicle class specific dwell time distribution or if there is a PT vehicle with user-defined doors and a waiting area using a location distribution for boarding passengers. **(7841)**
- ✔ Vehicle class specific lane closures work correctly now. Vehicles don't change anymore to lanes which are closed for their vehicle class, and they are not inserted on such lanes at vehicle inputs. **(7860)**
- ✔ Vissim doesn't crash anymore after a vehicle has selected a parking space with an adjacent parking space to the left (with left side traffic: to the right). **(7859)**

Viswalk

- ✔ The simulation doesn't crash anymore if a pedestrian area measurement doesn't start at simulation time zero. **(7845)**

6.00-01 [42713]

2013-08-06

+ New Features and Changes

Dialogs and Messages

- + A progress bar is shown when results are being read from the databases. **(7731)**

Viswalk

- ⊕ At a partial routing decision of type 'service point' pedestrians choose among all shortest queues the one which is closest to their current position (and not closest to the routing decision). **(7303)**

✔ Fixed Bugs

*.inp Conversion

- ✔ While converting data from Vissim 5.40, lane closure information is now considered correctly. Previously the settings of lane 1 were applied for all other lanes. **(7833)**

Dialogs and Messages

- ✔ Activating 'Don't show this message anymore' for warnings that appear before a simulation run will suppress all further warnings of any type. Errors will still be displayed. **(7780)**

Graphics

- ✔ The color and width of lane markings is now also considered correctly in 3D display mode if multiple network editors are active. **(7652)**

Public Transport

- ✔ While converting data from Vissim 5.40 the setting 'all PT lines' of partial PT routing decisions is now considered correctly. **(7843)**

Viswalk

- ✔ Editing the OD matrix dialog does no longer cause a crash if the time intervals for pedestrian routes and pedestrian inputs differ. **(7784)**
- ✔ The gradient of an escalator/moving walkway is now considered for the speed of pedestrians travelling on it. **(7830)**
- ✔ The values of the pedestrian attributes 'Speed' and 'DesSpeed' are now displayed correctly in the quick view and pedestrian list. Previously values were shown in m/s instead of km/h. **(7834)**
- ✔ While converting data from Vissim 5.40, the operational speed of escalators and moving walkways is now imported correctly. **(7832)**