PTV Vissim & Viswalk 6 Release Notes



the mind of movement

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

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6.00-07 [44239]

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:

2013-11-19

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)

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 dsiplayed 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)

2013-10-15

6.00-05 [43717]

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:

Oragging 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]

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 speficied 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 speficied 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 us 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]

2013-09-19

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:

ConvgCondMet: 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:

O 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 where 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)