

7.00-03 [49944]

2014-10-08

+ New Features and Changes

COM Interface

- + New example for basic COM commands in several programming languages (VBA, C++, C#, Matlab, Python) in the directory "Examples Training\COM\Basic Commands". The introductory document "Vissim 7 - COM Intro.pdf" has been updated, too. **(9112)**

Data Model

- + Attributes of static 3D objects can be changed during a simulation run. **(9045)**

Dynamic Assignment

- + The assignment of vehicles to the existing paths can be specified by user-defined path volumes. For this purpose there is the new attribute "Path selection method" (in the dialog "Dynamic Assignment" on the tab page "Cost and path handling", in the COM interface `Vissim.Net.DynamicAssignment.AttValue("PathSelMethod")`). This attribute has the two possible values "Kirchhoff" (default value) and "Use old volumes". If "Kirchhoff" is selected, the assignment uses the Kirchhoff exponent and the expected general cost values of the paths (edge total). If "Use old volumes" is selected, the probability for a vehicle to select a specific path corresponds to the share of the value of the path attribute "Volume (old)" in the total "Volume (old)" of all paths of the same parking lot relation. These volumes (for all time intervals) are read from the path file only at the start of each simulation run and saved in the attribute "Volume (old)". (In the attribute "Volume (new)", the vehicles using the respective path are counted during the simulation run.) If the path selection for a time interval (which has not yet begun) is to be modified during (!) a simulation run, the attribute "Volume (old)" of the paths must be set. If the path selection is not to be specified before (!) a simulation run, first the path file must be read, then the attribute "Volume (new)" of the paths must be set, and finally the path file must be written again (because only the values of the attribute "Volume (new)" is saved there). For reading and writing of the path file, there are two new menu items in the menu Traffic / Dynamic Assignment and new methods in the COM interface (`Vissim.Net.Paths.ReadDynAssignPathFile` respectively `WriteDynAssignPathFile`). The format of the path file doesn't have any effect anymore on the usage of the path volumes. Even with a path file created by ANM import, the path volumes are only used if the path selection method is set to "Use old volumes". The ANM import sets the path selection to "Use old volumes" automatically, however, if ANM routes are imported as paths for dynamic assignment. **(8957)**

Interfaces

- + The driving simulator DLL interface is available again. The functionality is identical with the interface of Vissim 5.40, except the parameter `snapFileName` of the function `VISSIM_Connect()` which is ignored as long as Vissim doesn't have the snapshot functionality. In Vissim, the interface can be activated and the vehicle type for the driving simulator vehicle(s) can be selected on the tab page "Vehicle Behavior" of the Network Settings dialog. **(7389)**

Viswalk

- + `Pedestrian.PedestrianType` can be changed during a simulation run, e.g. through the COM interface. **(7910)**

✓ Fixed Bugs

ANM Import

- ✓ Adaptive import doesn't cause all WTT file references of signal controllers to be duplicated anymore. **(9102)**

Charts

- ✔ Vissim does not crash anymore when a simulation run is deleted while a chart window with simulation run references is open. **(9108)**

Dynamic Assignment

- ✔ If the matrix file references zones which are not assigned to any parking lot and have non-zero demand, Vissim does not crash anymore. **(9106)**

Evaluations

- ✔ A signal head with the attribute "Discharge record active" set to true doesn't cause a crash anymore in a simulation run without activated discharge evaluation. **(9118)**

Graphics

- ✔ Storyboards: The camera speed of keyframe transitions with "Smooth start" or "Smooth end" does not change suddenly half way through the transition any more (the speed is now continuous). **(285)**

Lists

- ✔ Vissim does not crash anymore when a cell for color is currently selected in a list and the selection of the list is changed indirectly by duplicating, adding or through global selection. **(8930)**

Network editor

- ✔ Signal heads are displayed during simulation according to their type as left or right pointing arrows. **(8564)**
- ✔ More specific wording in the message window regarding completion of routes and PT lines. **(9049)**
- ✔ Moving a link cannot cause the error message "Unexpected end of node x" anymore at the start of a simulation run. (Very short node segments at the start/end of a connector cannot be removed anymore, so the node/edge graph can still be created.) **(9056)**

Signal Control

- ✔ The updated SCATS controller DLL doesn't crash anymore at the start of a simulation run. **(9160)**

Vehicle Simulation

- ✔ If a vehicle determines that its selected parking space is blocked by a standing vehicle on the adjacent (drive-through) lane, the parking vehicle now cannot change its selection to a different (not blocked parking space) anymore as soon as the front end of the vehicle has arrived in the originally selected parking space. Previously, a permanent gridlock could be caused if the blocking vehicle could not pass the parking vehicle which had its rear end still on the other lane. **(9110)**

7.00-02 [49473]

2014-09-11

+ New Features and Changes

ANM Import

- + In multi-lane roundabouts, lane closures (attribute "blocked vehicle classes") are used now instead of lane change restrictions. **(8860)**

Data Model

- + Managed lanes routing decisions have a new attribute "Managed lanes data" which combines the information about the current travel time savings, average speed on the managed lane route and current toll for single occupancy vehicles. (This can be displayed as label of the routing decision as in Vissim 5.40.) **(7917)**

Graphics

- + The graphic parameter "Fill style" is used for areas and ramps even if a color scheme is active. **(9047)**

Network Editor

- + The position of the mouse pointer is used correctly even if network objects are copied/pasted with Ctrl-C and Ctrl-V. **(9017)**

✔ Fixed Bugs

ANM Import

- ✔ Adaptive import works now for networks with roundabouts. **(8944)**
- ✔ Repeated adaptive import works correctly now even if there is a projection listed in the *.anm file. (Previously, the whole Vissim network was discarded because incorrectly changes were detected for all nodes.) **(8995)**

Dynamic Assignment

- ✔ Changes of link attribute values which cannot affect the node-edges graph don't cause the graph to be discarded anymore. **(9079)**
- ✔ If no cost file is defined in the dynamic assignment dialog, Vissim creates it anyway with a default file name as for the path file. **(8891)**
- ✔ PTV Visum Assignment can be called again. (This did not work in Vissim 7.00-00 and 01.) **(9028)**
- ✔ Running a dynamic assignment simulation while the path list is open does not cause a crash anymore. **(8839)**
- ✔ The convergence evaluation now yields correct values for edge travel times in each time interval. (Previously, values were aggregated over all previous time intervals.) **(9074)**

Evaluations

- ✔ In the lane changes record, negative vehicle numbers (of internal vehicles, e.g. signal heads, priority rules, conflict areas) are listed correctly (without adding 2³²). **(8996)**

Graphics

- ✔ The default class limits for the classified display of link segments depending on density have the correct order of magnitude now. When a color is changed which has the ARGB value (0, 0, 0, 0) (transparent black), the color picker dialog is initialized correctly now. The default colors for relative delay (20-30) and volume (1500-2000) have been changed. **(8886)**

Lists

- ✔ Cells with exact volumes are colored yellow now in the main vehicle/pedestrian input list as well. **(9018)**
- ✔ The layout of an open list window is restored correctly after reading a layout file even if this file contains a layout for a list window of that type. **(8907)**

Signal Control

- ✔ The *.wtt file name is set automatically to trend429.wtt and the program file name to trend429.exe for the controller type TRENDS when a new controller of such a type is created. **(8971)**

Simulation

- ✔ A simulation run with active 2D visualization was much slower than in Vissim 6. This bug has been fixed. **(9068)**

Test Mode

- ✔ PT telegrams are listed only once in macro files and are actually passed to all signal controllers. (Previously, they had been listed in each time step from their creation until the next signal controller time step but not passed to any controller when executing the macro.) **(8769)**

Vehicle Simulation

- ✔ The following bug has been fixed: If overtaking on the same lane is activated in the driving behavior, a vehicle following a vehicle of a type which may not be overtaken can move laterally during, trying to pass that slower vehicle, but aborts each single attempt. **(8997)**
- ✔ Vehicles are not stopped permanently anymore by a stop sign directly downstream of a conflict area. **(8414)**

Viswalk

- ✔ The walking behavior parameter lambda is limited correctly to the range 0 to 1 now. **(8981)**

+ New Features and Changes

Data Model

- + If a public transport stop gets a waiting area or a platform edge assigned, a default entry in the boarding passenger list of the stop is created if that list was empty before. **(8019)**

Dialogs

- + In the dialog "Connector", the option "Show aggregated values" on the tab page "Display" has been renamed to "Show classified values". (The functionality has not changed.) **(8890)**

Network Editor

- + When a public transport stop is moved to a lay-by stop (through the context menu), the created links are excluded from use by vehicles without a route or by dynamic assignment: The entry connector is closed for all vehicle classes and its desired direction is set to "right". **(8819)**

Signal Control

- + WTT files can be assigned to VS-PLUS controllers in the dialog "Signal Control" on the tab page "Controller (VSP)". **(202)**

Viswalk

- + If the license doesn't contain vehicle simulation, there are no vehicle related network objects anymore in the "empty" default network in the file defaults.inpx (which is now located in the subdirectory Viswalk 7 instead of Vissim 7). **(8168)**
- + The signal head attribute "compliance rate" affects pedestrians now as well, so they can ignore red traffic lights with a defined probability. **(8078)**

✓ Fixed Bugs

ANM Import

- ✓ A bug during the first adaptive import of a network with a projection caused subsequent adaptive imports to fail with the message "Projection settings of ANM files differ.". This bug has been fixed. **(8935)**
- ✓ Bypasses at roundabouts don't cause the import to fail anymore. **(8899)**
- ✓ The import doesn't fail anymore if the total of the length of a triangular island and the pocket length is almost the same as the length of a different pocket. (This could be caused by rounding imprecision in networks with Imperial units.) **(8351)**
- ✓ The import of a roundabout doesn't fail anymore with a message like "Link 15 cannot be inserted: there must be at least 1 items in the lanes container." (This could happen if there was a bypass with all entry lanes being pockets.) **(8929)**
- ✓ The import of networks with roundabouts doesn't fail anymore if the lane turns in the roundabout have no destination lane index. (Such networks are created by Visum if a standard geometry is exported and the option "Use lane definition" is activated in the node.) **(8895)**

Charts

- ✓ If a chart window displays a result attribute for a specific time interval when this time interval is deleted (because the interval length is changed in the evaluation configuration), there is no crash anymore. **(8990)**

Dynamic Assignment

- ✓ Changing the simulation or evaluation period now invalidates the dynamic assignment graph in order to avoid a crash. **(8952)**
- ✓ For the creation of static routing, vehicle composition elements with relative flow smaller than 0.001 out of a total of 1.0 (i.e. smaller than 0.1%) are ignored now. (Previously, the creation of static routing failed in this situation.) **(8804)**
- ✓ Vissim does not show a warning message anymore when the user opens the path list in an empty network. **(8892)**

Evaluations

- ✔ If the option "Overwrite all previous results" is selected in the evaluation configuration, the simulation run number is now reset to 1 again before the first run of a multi-run simulation. (This did not happen in version 6.00-18 and 7.00-00. Since 6.00-18, however, the results of each simulation run are deleted at the start of the next simulation run even during a multi-run.) **(8866)**
- ✔ Node evaluations include PT vehicles now (in result attributes and raw data) even if the distance from the start of the PT line to the node is smaller than the distance to the start of the delay measurement as defined in the evaluation configuration (default: 100 meters) and the node entry is on the start link of the PT line. **(8965)**

Graphics

- ✔ Color schemes work correctly now for vehicles and pedestrians even if Imperial units are selected. **(8988)**

Lists

- ✔ In certain situations with Auto-Pan/Auto-Zoom, list cells could be sporadically blacked out completely. This problem has been fixed. **(8882)**

Network Editor

- ✔ A node segment that spans not a complete link/connector is selected with priority over the link/connector when clicking on it. **(8821)**
- ✔ Inserting a background image from ECW files caused a crash on some ATI graphic cards (e.g. FirePro V3800) with the latest drivers. This problem has been fixed. **(8725)**
- ✔ Labels of pedestrian inputs, routing decisions and travel time measurements as well as vehicle travel time measurements can be dragged without problems now. **(8791)**
- ✔ Occasional crashes after deleting lanes don't occur anymore. **(8983)**
- ✔ Occasionally, a DWG/DXF file could not be loaded during manual insertion of a background image (but networks already containing this background image could be loaded correctly). This problem has been fixed. **(8580)**
- ✔ On some systems ECW background images could not be loaded anymore. This problem has been fixed. **(8614)**

Signal Control

- ✔ The *.wtt file name (corresponding to the program file name) is set automatically for the controller types VS-PLUS and TRENDS when an *.inp file (from Vissim 5.40) is read. **(8826)**
- ✔ The function "Optimize Signal Control" works again now. **(8841)**
- ✔ VISSIG (stage oriented fixed time control): If the first time in a daily signal program didn't start at 00:00:00 (but e.g. at 00:10:00), the simulation crashed at that first time (e.g. after 600 simulation seconds). This bug has been fixed. **(8849)**
- ✔ VISSIG (stage oriented fixed time control): The change of the number of an interstage doesn't cause an exception message anymore. **(8846)**

Simulation

- ✔ The option "Automatically add new columns in lists" doesn't cause a crash anymore when the simulation is started with "Number of runs" larger than 1. **(8900)**

Viswalk

- ✔ If a pedestrian approaching a PT vehicle doesn't reach the vehicle before the departure and thus must walk back to a waiting area but there is no way back (e.g. because of an escalator), the simulation doesn't crash anymore. **(8840)**
- ✔ Pedestrians can walk on a stopped escalator (speed zero) now even if the bottom step is mostly below ground. **(8869)**
- ✔ Pedestrians with very high desired speeds in queues who leave the walkable ground and are thus removed from the network don't cause the simulation to crash anymore. **(8962)**