VISUM Release Notes

Version 11.5

Version 11.51-05
Last modified: 2010-11-19

traffic mobility logistics.

Data Model

- *Closing of main turns:* When main turns were closed in the past, allocated lane turns were not removed. This caused VISUM to crash at a later stage, and version files got corrupted. This bug has been fixed. (**9521**)
- *Create transport system:* Now the settings of the volume delay functions in PrT are also transferred, when a user creates a transport system and transfers the network attributes of another transport system. (**9518**)
- *Signal controllers:* Now a user can also edit the attribute "Is reference SC" for external controls. (**9525**)
- *Create transport system:* Some special cases led to a system crash. This bug has been fixed. (**9526**)

Dialogs

- *Filters:* The width of the labels in the column "Attribute" now depends on the name of the set attribute. (**6361**)
- *Classification dialog:* The dialog labels now refer to the graphic item that is used. (**9415**)

Graphics

- *Desire line:* If a matrix value has been changed (for example in the OD pair list), now the n largest OD pairs are automatically recalculated, even if no filter for OD pairs is active. (**8306**)
- *Display of directed point objects:* If an image is used to display a directed point object (e.g. count location or stop point), the image is now shifted correctly. (**9528**)
- *Edit turn volumes:* When calling up the turn volumes dialog, the user can optionally activate the turn volumes layer. (**9524**)
- *Signal time-space diagram:* VISUM now has a new view for the visualization of the signal coordination on different nodes. This is a path-time diagram for a link sequence which shows the location of the greentime of the considered signal control. (**8800**)
- *Multi-export of turn volumes:* Conflicts with file names will be avoided in the future. (**8956**)
- *Traversed stop points:* Now traversed stop points no longer will be drawn in the extended marking only. (**9515**)
- *Graphic parameters diagram:* When reading older versions of graphic parameters files, now the field for decimal places is filled correctly again. (**9534**)
- *Column chart:* The scaling for negative values now works correctly again. (**9478**)
- *Export of turn volumes:* VISUM now provides a feature for the multi-export of turn volumes in the format *.svg. (**8953**)

Matrix Editor

- *Graphic parameters:* The graphic parameters for a matrix are kept during network editing, even after the Matrix editor is closed. (**9510**)

Demand Operations

- *VISEVA:* If shared mode choice matrices are used for the involved demand strata, up to now by mistake only the result for the demand stratum that was calulated at last was returned. This bug could be fixed. (**5773**)
- *Calculate PuT skim matrices:* The statuses of the check boxes are now displayed correctly in the 'Basis' tab of the procedure's parameter dialog. (**9513**)
- Procedure 'Eva Distribution/Mode Choice': The procedure has been parallelized and is therefore now significantly faster. (**9523**)
- *Procedure parameters VISEM trip distribution/mode choice:* In certain cases the system used to crash when reading binary files that contained procedure parameters of the named procedure. This bug has been fixed. (**9529**)

Miscellaneous

- *"Help" menu:* Under certain circumstances the menu entries of the user manuals were grayed out (inactive). This bug has been fixed (**936**)

PuT Assignment

- *Network volume and statistics, transport system-based PuT assignment:* If the procedure is

executed, now the list "PuT assignment statistics" is filled with values. (**9456**)
► *Timetable-based PuT assignment:* The procedure no longer freezes when a flow bundle and the filter for OD pairs are active. (**9504**)

VISUM Files

► *Read network file additionally:* In the past inconsistent data and system crashes could occur when the 'ignore' mode was used when reading a network file additionally with main zone and zone tables with main zone interdependencies. This bug has been fixed. (**9527**)

11.51-04	Corrections, Bug Fixes and New Features (ID)	2010-11-11

Data Model

► *PrT paths:* The program will no longer crash when a node is deleted with merging of links if it is traversed by a PrT path and the Undo stack is cleared subsequently. (**9467**)
► Some of the PrT-specific attributes of basic network object types (the SCJ number per node, for instance) have been shifted from the 'Basis input' attribute group to the 'PrT input' attribute group. (**7742**)
► *Signal groups and crosswalks:* If a signal control has been allocated to multiple nodes and if a crosswalk is allocated to a signal group at one of these nodes then the crosswalk allocations of this signal group at other nodes will no longer be discarded. (**9483**)
► *Mean wait time at signal control:* Analogously to nodes, the attributes 'Level of Service' and 'Level of Service mean delay' are also provided for signal controls (SCJ) now. (**9376**)

Dialogs

► *VDF definition:* In the VDF list, the entry in the marked cell appears much clearer now. Furthermore, multi-delete can be applied to VDFs now. (**5365**)
► *HAFAS import parameters:* VISUM will no longer crash when the 'Open file' dialog is closed. (**9493**)
► *Transport systems dialog:* The program will no longer crash if a transport system is deleted and then a new transport system is created with the name of the deleted TSys. (**9492**)

Graphics

► *Desire line:* Desire line links are no more moved aside together with their bars if a distance between bars is specified. Desire line links always connect zone cetroids directly. (**9519**)
► Visum will no more crash when drawing desire lines, if there is no desire line bar to draw and of the layers bars and desire line links are switched on. (**9512**)
► *Redraw after version comparison:* Subsequently to a version comparison update, the network will be redrawn. (**9506**)

Junction Editor

► *External signal controls:* Changes in the external signal control dialog are immediately visible in VISUM now without closing this dialog window. (**9494**)

Listings

► *List link types:* The link type list is updated when the set of active links changes (since indirect attributes exist that might be concerned, e.g. MaxActive). (**9391**)

Matrix Editor

► *Histogram:* VISUM will no longer crash if the classification matrix and the processed matrices do not match. (**9497**)
► *Matrix editor - Edit graphic parameters: Classified display of active cells:* Now, the classes are subject to changes even if the option "Classified drawing mode" for "Matrix values" has been selected. (**9408**)

Demand Operations

► *Mode choice:* Option "Apply to all DStrata" now works even for data rows that have recently been added to the utility table. (**9465**)

Network Editor

► *Spatial selection, checkboxes for PuT lines:* The PuT line selection checkbox settings are now regarded for 'Invert selection' etc. (**7207**)

- ▶ *Coupling:* It is now possible to couple in sections with different route points but identical time profile items. (**856**)

Other Operations

- ▶ *Signal cycle and split optimization:* For each signal control, the optimization is performed separately. If multiple nodes have been allocated to a signal control, all of these nodes are regarded simultaneously. (**9296**)
- ▶ *Signal cycle and split optimization for external SCJ:* The procedure 'Signal cycle and split optimization' now also supports external VISSIG controls of signal controls (SCJ). (**9297**)

PrT Assignment

- ▶ *Blocking back with LUCE or DUE:* Blocking back is now calculated with either assignment procedure if option 'Blocking back calculation also during assignment' has been checked. (**9464**)

VISUM Files

- ▶ *Model transfer files:* Now also matrices that were saved to an external file when the demand file was saved are now taken into consideration when a model transfer file is saved. This means, that the matrix data is compared and will be stored with the model transfer file, if applicable. (**9469**)
- ▶ *Model transfer files:* The geometry is adjusted correctly now if links are deleted via model transfer files. The program will no longer crash in this case. (**9498**)
- ▶ *Item 1: The filename entered for a COM command is always used as specified, the matching file extension will not be added automatically. Item 2:* When a file is opened interactively, the default file extension is added only if the file exists *with* this extension only. (**9446**)
- ▶ XML files now store attributes of the type length, speed or area with their units. Thus, even after toggling between imperial and metric units the particular data is read correctly from XML files. Furthermore, the attributes SourceBufferSize and DestBufferSize (with IntersectAttributePara) and BBackSpacePerVehUnit (with AssignmentICAPara) are of the 'short lenght' type now. That is why these values can be returned in [ft] or [m] via COM according to the currently selected unit system. (**9417**)
- ▶ *Open a model transfer file:* The network scale is no longer set if the scale is the same in both networks, since rounding used to cause differences. (**9502**)
- ▶ *Matrices in $O format:* The option 'Sum up all values per (Main) OD pair' set via menu Extras - Options is taken into consideration now. Furthermore, the number of decimal places is correct now after reading or writing an external matrix file in $O format. (**9482**)

11.51-03	Corrections, Bug Fixes and New Features (ID)	2010-10-27

Add-In

- ▶ The frame script for Python calls which has been integrated in VISUM does no longer import VisumPy (in exactly this diction). In this way, some cases of script calls that used to fail could be eliminated. (**9407**)
- ▶ *Add-in 'Calculate Matrix':* It is now possible to execute the add-in 'Calculate Matrix', if a filter is defined. (**9450**)

Dialogs

- ▶ *Links dialog:* When entering digits into input fields for attributes with units, in the input fields the numerical order is no longer changed. (**9445**)
- ▶ *Edit stop dialog:* When editing walk times or special wait- und walktimes, input is correctly interpreted according to the currently used option concerning default time format. (**9472**)
- ▶ *PrT paths dialog:* VISUM will no longer crash if option 'Only flow bundle paths' is selected for the conversion of the paths. (**9434**)

Difference Network

- ▶ *Version comparison and link bars:* The network is now redrawn if the version comparison includes the automatic link bar change. (**9480**)

PuT Passenger Survey

- ▶ *Read multi-line survey data:* The system no longer crashes, if in multi-line formats no origin zone and no from-stop is specified. (**9443**)

Timetable Editor

▶ *Delete vehicle journey sections:* The program will no more crash when deleting multiple vehicle journey sections when block display is open and if block items based on the deleted vehicle journey sections exist. (**9460**)
▶ *PuT line selection:* Changes to the basic line selection in the timetable editor will no longer cause a program crash. (**9428**)
▶ *Coupling in timetable editor: Up to now in the following situation erroneously the message "Coupling not possible" was displayed:* If the common section of two vehicle journeys included only two time profile items, and the to-times of the second item were different. This no longer happens. (**9427**)

Foreign Formats

▶ *DXF export:* It is now possible to export languages with Unicode character sets (especially Russian, Greek, etc.). For languages like Chinese or Japanese, a multibyte conversion would be required which is not possible. (**9440**)

Graphics

▶ *Preview:* The system no longer crashes in the preview. This happened in the past, if VISUM had to generate too many graphical objects. (**9439**)
▶ *Distance between flow bundle links for display of desired lines:* The distance between the bars for desired lines now regards the desired lines links including the corresponding bars instead of only the links. (**9416**)

Listings

▶ *PuT path legs:* The list is now updated as soon as time profile attribute data changes, for instance the number of fare points. (**9449**)

Matrix Editor

▶ *Histogram:* The matrix histogram can now display an y axis and label it with relative shares. (**5118**)
▶ Matrix data is also displayed for more than 32,000 zones. (**9365**)
▶ *Matrix histogram and loading another network:* The program does no longer crash if another network is read from file while the matrix histogram is kept open with a classification matrix. It does no longer prevent the deletion of an external matrix which is being used for the classification. (**9461**)

Demand Operations

▶ *Create sequence of operations:* When creating a sequence of operations with GoTo-operation (4-step demand model, EVA, and VISEM), in the GoTo-operation the matrix parameter is now set correctly. (**9444**)
▶ *VISEVA:* If shared mode choice matrices are used for the involved demand strata only the result for the demand stratum that was calulated at last used to be returned by mistake. This bug could be fixed. (**5773**)
▶ *Mode choice procedure:* The procedure will no longer cause a program crash if zone attributes are selected for the utility definition. (**9477**)

Network Editor

▶ *Coupling: Coupling is not possible in the following situation:* Two time profiles have identical items (i.e. all items are on the same stop points or nodes) but the topology of the line route items is not identical. (**839**)
▶ *Line blocks including empty trips:* Empty trips based on systems routes are adapted to changes to length or duration. If a system route is deleted, block items based on this system route are maintained and become emoty trips not based on a system route. (**9448**)
▶ *Line filter call:* When the line filter is called from the overview toolbar initially the 'Lines' tab will appear. (**9441**)
▶ *Multi-Edit Links special function 'Polygons':* The "Only active ones" checkbox setting is now regarded. (**9468**)

Other Operations

▶ *Combination of matrices and vectors:* If option "Regard only active od pairs" has been checked, the values of passive od pairs remain unchanged now instead of being reset to zero. (**9453**)

Miscellaneous

▶ *Running script files:* Even if the file extension 'vbs' has not been connected as usual VISUM seeks for the VBScript Script Engine for running those scripts. (**9435**)

PuT Assignment

▶ *Shortest path search:* By mistake, the shortest path search used to find only a single path leg A-C, though a vehicle journey A-B and another vehicle journey B-C existed on a time profile with the second trip departing exactly when the first one arrived. This could lead to a program crash, for instance during the direct assignment. (**9459**)

VISUM Files

▶ *Read network additionally:* By mistake, warnings concerning 'Create PT line route' (such as 'Open turn?') were not displayed on screen, automatically NO was confirmed instead. That is why line routes could not be created. This bug could be fixed. (**9471**)

11.51-02	Corrections, Bug Fixes and New Features (ID)	2010-10-13

Add-In

▶ *Add-in FareSubZone -> POI:* The add-in now terminates correctly. Afterwards other add-ins and scripts can be started. (**9403**)
▶ *Program startup:* If an add-in cannot be found during program startup, an improved error message provides hints how to solve the problem. (**9371**)
▶ Unhandled exceptions in Python-scripts and add-ins are now logged in the error file automatically. (**9406**)

COM Interface

▶ All messages generated by ScriptMuuli appear in english now. (**9431**)
▶ *Script execution:* VISUM no longer crashes, if a script is started that does not exist. (**9409**)
▶ *ANM export:* Renamed parameter 'writeNetwork' to 'writeRoutes'. The parameters 'writeNetwork' and 'writeMatrices' were interchanged; this has been corrected. (**9426**)
▶ *Running scripts:* The folder ".\" is no longer modified when scripts are run. (**9373**)
▶ *INetPara::SetProjection:* When a projection is set, the syntax is checked and a detailed error message will be returned, if applicable. (**9423**)

Data Model

▶ *Signalization:* Adjustments were made to the minimum green times of signal groups. This also affects the optimization and NEMA imports. (**9421**)
▶ *Blocks:* If the vehicle combination set of a vehicle journey section is changed, blocks with the property 'Has vehicle exchange' are also changed and get the property 'Has vehicle fault'. (**9095**)
▶ *Multi-edit links TSysSet:* If geometries existed, VISUM sometimes crashed. This bug has been fixed. (**9411**)

Dialogs

▶ -- (**9424**)
▶ *EVA Trip Generation:* In the Eva trip generation window now all controls are displayed again. (**9209**)
▶ *Save procedure parameters:* When saving procedure parameters in some cases a file name with the extension *.xml is displayed. In this case also the dialog switches to the file type *.xml to avoid the creation of a file with the extension '.xml.par'. (**9313**)

Difference Network

▶ If an attribute with sub-attribute was selected for the version comparison, VISUM used to regard one of either value instead of the total value for the cross-section logic. (**9410**)

Timetable Editor

▶ *Block display:* User-defined block items overtake the correct data from their insert position when inserting them while the time for day change is shifted. (**9433**)
▶ *Block display:* A new search dialog allows to search for vehicle journeys in the gantt diagram. (**9050**)

Junction Editor

▶ *Signal timing view:* Greentimes now are depicted correctly in the signal program view. (**9438**)

Matrix Editor

▶ *Vector as data source:* Now it is possible to use zone attributes and main zone attributes (i.e. vectors) as data source for matrix operations. (**5102**)
▶ The colors of cells in the matrix editor can now be edited just as flexibly as the color settings in the network graphics parameters. (**9383**)

Network Editor

▶ *Edit territory shape:* VISUM used to crash if the territory included an empty polygon before. This bug could be fixed. (**9400**)
▶ *Split link:* Cancelling the split link operation in an assigned network will no longer cause a program crash. (**9405**)
▶ *Edit shape of line routes, separating couplings:* Though the message appeared, the couplings were not discarded when the line route shapes were edited. This bug could be fixed. (**9414**)
▶ *Node geometry:* VISUM no longer crashes, if a user removes crossing lane turns and then undoes this action. (**9404**)

Other Operations

▶ *Matrix disaggregation:* The zone attribute ID of the disaggregation weights is now read correctly from files of type *.par and *.ver. (**9419**)

Miscellaneous

▶ *Script menu:* In the registry, VISUM does no longer change the key names which describe the script menu commands. (**9326**)

PuT Assignment

▶ *Tariff model:* The program will no more crash when calculating fares for circle line transitions. (**9425**)
▶ *Shortest path search with reverse correction:* In the rare case when the reverse correction found simultaneous departures on different time profiles, up to now no consistent results were achieved. No the user gets repeatable results. As a consequence, the following results may change: timetable-based assignment (only applies to the shortest path search using reverse correction), passenger surveys, calculation of isochrones, interactive shortest path search. (**830**)

VISUM Files

▶ *ANM export:* Routes using blocked links are no longer included. (**9422**)

TFlowFuzzy

▶ *Save flow matrix:* The algorithm has been changed. Therefore, the flow matrix calculation calculates further values (vector of assignment sums). When saving, they are written into the flow matrix. (**9381**)

11.51-01	Corrections, Bug Fixes and New Features (ID)	2010-09-28

Dialogs

▶ *Dialog Line style parameters:* The program will no more crash when more than one stroke layer is used. Settings will no more be copied when switching from one layer to another. (**9398**)
▶ *Ticket types:* The program will no more crash when creating more than one identical classes by editing the key column directly within the ticket type grid. (**9308**)

Demand Operations

▶ *Nested Mode Choice:* The program will no more crash during nested mode choice procedure if there are modes without assigned matrices. (**9390**)

Network Editor

▶ *Delete nodes:* If a stop point is located on a node and if, when deleting the node, the procedure is aborted by the user since the resulting adaption of time profiles is negated, the node will no more be deleted. (**9379**)

Other Operations

▶ *Matrix procedures:* The procedures MSA over matrices and combination of matrices and vectors now don't crash when the output matrix does not exist. (**9231**)

Miscellaneous

▶ *Several procedures:* The program will no more crash if protocol or other output data should be written to a file and if the given path does not exist. (**823**)

VISUM Files

▶ *Read / write matrices:* When reading matrices in text format, spaces are ignored before the comment character. Matrices containing such lines with space before '*' will no more be written. (**9159**)

11.51-00	Corrections, Bug Fixes and New Features (ID)	2010-09-24

Add-In

▶ *Instable behaviour of add-ins and crashes:* The stability of add-ins has been considerably improved. Please also refer to the 'Notes for upgrading users' for nescessary modifications if Your scripts/AddIns make use of wxPython for the user interface. (**8936**)
▶ *Add-in 'EVA demand model':* The add-in no longer crashes, if the EVA demand model is incomplete. (**9135**)
▶ The add-in 'Simple difference Network' has been removed. This functionality is now provided by the version comparisons introduced with VISUM 11.5. (**9375**)

COM Interface

▶ There is a new COM method for setting the default time format (Extras > Options > Formats). (**7693**)
▶ *Transport systems:* There is a new COM method for creating a transport system that corresponds to an existing system. (**9111**)
▶ There is a new COM interface to start the extended route choice. (**9219**)

Data Model

▶ *Copy time profile:* If a time profile is copied, now specific transfer walk times and wait times are copied as well. This also applies to coupling in the timetable editor. (**9312**)
▶ *System routes:* It is now forbidden to insert the opposite direction of a system route if one of the two terminal stop points is directed. (**9305**)
▶ Matrices can now have user-defined attributes. (**9254**)
▶ Demand strata can now have user-defined attributes. (**9255**)
▶ *Bars and version comparison:* The system no longer crashes or displays bars incorrectly during a version comparison, if a user selects the entry 'Like scaling attribute' in the graphic parameters for the bar fill style. (**9369**)
▶ *Forced chainings:* Deleting lines (line routes, time profiles, etc.) in a network with forced chainings now works faster. (**9311**)

Dialogs

▶ *Relations:* The system no longer crashes, if a user expands relations comprising several levels in the attribute selection window. (**9366**)

Graphical Operations

▶ *PuT Flow bundle:* 1. Boarding passengers boarding at the start of a path leg are no longer counted as passing through. 2. Traversed stop points without a time profile item are counted as passing through - no stop. (**9395**)
▶ *Edit flow bundle:* The system no longer crashes, if a user edits the flow bundle parameters and has the path list open. (**9378**)

Installation

▶ *Installation via inf:* When installing without Python it will be grayed out in the component selection. (**9380**)

Listings

▶ Now a demand strata list is provided. (**9256**)
▶ *Lists 'Line blocks' and 'Line block items':* The course of the line block is marked in the network window similar to PrT or PuT routes. (**4300**)

Matrix Editor

▶ The new matrix editor nor provides a COM interface. It is posssible to open or close windows and to set certain parameters. For details see the new COM interface documentation. (**5020**)
▶ *Open version file:* If matrix windows were open during the save process, they will be restored on opening a version file is if the corresponding option is set. (**5032**)

Other Operations

▶ When reading legacy data which contain operations that are no longer available in the current release, VISUM no longer simply stops reading the version file. Instead, an operation of the type 'Invalid operation' is inserted into the procedure as a placeholder. Eventually, this operation must be deleted to make the procedure executable again. (**775**)
▶ *Write skim matrices to file:* The file name will be overtaken from the dialog correctly. (**9367**)
▶ *Operation 'Save version':* In some cases VISUM stopped the execution of procedures due to supposed errors in the 'Save version' operation, although the operation was successful. This no longer happens. (**9374**)

PuT Line Blocking

▶ Line blocking (both procedures): Sometimes no solution could be found, and an error message was displayed. This no longer happens. The error correction changes the results because now sometimes a different but equivalent flow solution is found. (**9196**)

VISUM Files

▶ *Assignment with ICA:* The parameters of the assignment with ICA are now accessible via COM. They have been included into the XML procedure parameter file. (**8467**)
▶ *Blocking back model:* The parameters of the blocking back model that are displayed under Procedures > Functions > PrT functions are now accessible via COM. They have been included into the XML procedure parameter file. (**3856**)

TFlowFuzzy

▶ *Save flow matrix:* The algorithm has been changed. Therefore, the flow matrix calculation calculates further values (vector of assignment sums). When saving, they are written into the flow matrix. (**9381**)
▶ *Calculate flow matrix:* When calculating the flow matrix, the counted data is also distributed across the individual demand segments. If the global filter is activated, this also happens if there is just one demand segment. (**9382**)
▶ The TFlowFuzzy matrix correction procedure may now use internal VISUM matrices alternatively to matrix files as parameters. (**9122**)

11.50-07	Corrections, Bug Fixes and New Features (ID)	2010-09-14

Data Model

▶ On certain paths it was possible to assign more than one transport system to one PrT mode. This bug has been fixed. (**9263**)
▶ It is no longer possible to assign a number to a POI which already has been allocated within its category. (**9315**)

Dialogs

▶ *Version comparison, attribute selection:* Several improvements have been made. (**9324**)
▶ *Edit line route:* The column "<>" no longer displays black boxes. (**9322**)
▶ *Forced chainings dialog and wizard:* In both dialogs, the attribute selection refers to the tables. (**9251**)
▶ *OD demand data dialog and filter dialogs:* In some cases using the key combination Ctrl+C led to a system crash. This bug has been fixed. (**9317**)
▶ *Edit graphic parameters:* When an invalid value for point symbols is entered the program no longer displays the same warning several times. (**9184**)

Filters

▶ *Filter dialog:* After removing filter rows and clicking OK in some cases a message was displayed saying that there are faulty parentheses. This message appeared even if the expression contained two rows or less. Now parentheses that are no longer required are removed. The message no longer appears. (**9268**)

Graphics

▶ *Multi-export of turn volumes:* During the multi-export of turn volumes the circle size in the export parameters is considered. (**9332**)

Network Editor

▶ *Multi-delete nodes:* The program will no more crash when multi-deleting nodes if crosswalks exist in the network and UNDO stack is not active. (**9316**)
▶ *Edit shape of line route:* If the shapes of line routes are edited and as a consequence couplings are separated, an entry is written into the file trace.txt. (**8940**)

PuT Assignment

▶ *Timetable-based assignment:* For simple fare models the timetable-based assignment now runs as fast as it did in VISUM 11.0 again. (**9314**)
▶ *Paths and MPA:* If paths are calculated using MPA and saved as *.CON file, during the import the distribution is carried out according to connector shares. (**490**)

11.50-06	Corrections, Bug Fixes and New Features (ID)	2010-09-07

Data Model

▶ *Coupling:* The coupling sections are now correclty adjusted, if a coupled section is shortened at its start. (**9291**)

Dialogs

▶ *Attribute selection:* The program will no longer crash when a user tries to extend the sum branch of a relation. (This bug only occurred only after the installation of the last service pack.) (**9304**)
▶ *Save attribute file:* The dialog title clearly states whether data will be written to file or database. (**9058**)
▶ *Line blocking:* Save option "Forced block check" in registry. (**9118**)

Foreign Formats

▶ *GIS objects:* The access to external attributes in lists is now possible again. (**9310**)

Network Editor

▶ *Quick view window:* Marked areas in the quick view window are automatically deactivated when the user selects a different network object. In the past, marked areas remained active which sometimes led to crashes. (**9292**)
▶ *Quick view window:* The advanced input options in the quick view window are working again. (**9290**)
▶ *GIS objects:* The context menu option "Create UDA" was grayed out (deactivated) as no user-defined attributes for GIS objects exist. (**9303**)

PuT Line Blocking

▶ *Block check:* If a forced chaining exists and a user checks whether an empty trip can be inserted layover times are no longer considered. (**9286**)
▶ *Block check:* If long empty trips or extensive user-defined block checks exist, the block check no longer reports errors due to unauthorized layover times, and the forced block check no longer reports errors due to unauthorized block days. (**9282**)
▶ Line blocking (both procedures): Blockings are now generated correctly, if forced chainings enforce a shorter layover time and simultaneously an empty trip is required. (**9273**)

11.50-05	Corrections, Bug Fixes and New Features (ID)	2010-09-02

COM Interface

▶ *INode / IMainNode:* The COM method UpdateImpedance optionally writes a report, depending on

procedure parameters. (**9244**)

Data Model

- ▶ *Remove transport systems:* When removing a transport system blocks using it as empty trip transport system are removed as well. (**9278**)
- ▶ *System routes:* If a system route uses a turn, this turn must not be blocked for the transport system of this system route. (**9235**)
- ▶ *Fares:* The number of traversed fare zones is calculated correctly in complicated networks, too. (**9242**)
- ▶ *Signal controllers:* There are no rounding errors anymore when signalgroup-based controllers are converted to stage-based controllers. Since this conversion is used implicitly in signal cycle and split optimization, this may lead to minor differences in the results. (**9243**)

Dialogs

- ▶ *Graphic parameters for diagrams:* Column diagrams are drawn correctly if there is more than one column, one of the attreibute values is 0, and the option "hide if (absolute) value <=" is disabled. (**2637**)
- ▶ *Print settings:* The menu item "Set print page..." now works even in case a list view ist active. Moreover, the menu item appears in the "Layout" menu as well now. (**9175**)
- ▶ *Attribute selection:* The program will no longer crash if one tries to add an alias pointing to an attribute with sub-attribute that does not exist any more in the attribute selection dialog. (**9270**)
- ▶ *PuT fares:* Multiple minor grid bugs were fixed. (**9241**)

Timetable Editor

- ▶ *Block display:* The program will no longer crash if a block is inserted while the tree showing all blocks is open and if the insertion is canceled within the dialog. (**9271**)
- ▶ *Block display:* When creating an user-defined block item, the blocking day will always be determined correctly from the insert position. (**9272**)

Foreign Formats

- ▶ *SVG export for Inkscape:* Point symbols are scaled correctly. (**8845**)
- ▶ *Import shapefile:* Point objects do not loose their coordinates when importing as stops. (**9229**)

Graphics

- ▶ *Desire lines:* Desire line links are drawn if the bar layer is switched off. (**8751**)
- ▶ *Turn volume parameters:* When editing graphic parameters of text blocks in Turns->Turn volumes->Text format->Standard, the new settings can optionally be applied to all active turn volumes. (**9173**)
- ▶ *Draw link bars:* Link bar labels are no longer moved by the link's width if the bar layer is switched off. (**9252**)
- ▶ *SVG as background in VISUM:* Dashed lines are displayed correctly. (**6944**)
- ▶ The network no longer disappears when pasting empty list contents. (**9261**)
- ▶ *Version comparison:* Bars of percental difference attributes are displayed correctly now. (**9283**)
- ▶ Background JPEG images larger than 500x500 pixels were always exported in black and white when printing to a PDF. (**9257**)
- ▶ *Turn volumes:* Bars on straight turns are displayed correctly now. (**9233**)

Graphical Operations

- ▶ *Read network file additively and shortest path search:* If a PrT shortest path search has been executed in a network, when reading a network file additively the shortest path search will no longer be executed after each line containing a turn, but only once when reading the file is finished. This speeds up reading network files in this case. (**4147**)

Listings

- ▶ *PuT partial routes:* Indirect attributes of ticket types are updated correctly on network changes now. (**9246**)

Matrix Editor

- ▶ *Matrix histogram:* VISUM no longer crashes if all intervals are deleted in a histogram of multiple matrices. (**9259**)
- ▶ *Matrix histogram:* All toolbar icons of the matrix editor now work correctly if both matrix editor and

matrix histogram are open. (**9258**)

▶ *Layout:* The matrix editor supports saving and loading layout files from now on. (**5031**)
▶ *Graphic parameters:* Graphic parameters for the matrix editor are available now. They can be used to produce a classified depiction of grid cells and can be stored in a parameters file. (**5168**)
▶ *Histogram:* The program will no longer crash when opening a version file or creating a new network while a matrix histogram is open. (**9265**)

Miscellaneous

▶ Context sensitive online help (fare systems): The context sensitive online help now works for all the pages of the fare system dialog. (**9279**)
▶ *Copy & paste in matrix editor:* Copy & paste from matrix editor into excel maintains newlines on chinese operating systems as well. (**9177**)

PuT Line Blocking

▶ *Block check:* The program will no longer freeze (endless loop) while executing the block check procedure if, by inserting empty trip items, the standard sort order of block items is changed. (**9119**)
▶ *Block Check:* Layover times before the first and behind the last service trip block item are maintained when checking open blocks. (**9216**)
▶ *Blocks:* The program will no longer crash if changes to the pre or post preparation times leads to the deletion of the corresponding block item. (**9250**)

PrT Assignment

▶ *Eqilibrium-Lohse and stochastic assignment:* The range of the termination parameter has been enlarged s.t. a factor of 0 can be used instaed of 0.01. (**9253**)

PuT Assignment

▶ *Connection import:* VISUM no longer crashes if reading network volumes fails. (**9239**)

VISUM Files

▶ *Attribute files:* The program will no longer crash when reading an attribute file containing a column named as an alias exisiting in the current network and pointing to an attribute with sub-attribute. (**9269**)

11.50-04	Corrections, Bug Fixes and New Features (ID)	2010-08-23

Add-In

▶ *Add-Ins:* The window header now always matches the title of the document. (**9148**)

COM Interface

▶ *Shorten a line route:* This functionality will no longer freeze. (**9204**)

Dialogs

▶ *Set up and edit classification:* Setting up the class limits now works correctly. (**9225**)
▶ *Save network: The table and attribute selection is no longer reset if one of the options is checked:* "Save only active network objects", "Hide empty tables", "Hide attributes with default values". (**8822**)
▶ *Edit line route:* Arrival and departure times are editable now. (**7718**)
▶ *Line route dialog:* The arrival and departure data is correct now, even if an additional stop event with dwell time > 0 was added above a reference point. (**9211**)

Timetable Editor

▶ *Block display:* The valid days label uses "not valid" for days outside calendar now, when searching for a matching valid days object in the network (**9195**)

Filters

▶ *Filter dialog:* In certain cases, VISUM used to crash if the first data row in the filter conditions grid was deleted. This bug could be fixed. (**9223**)

Graphics

▶ *Set up and edit classification:* Automatic class limits can now also be calculated with natural

breaks. (**8868**)

Matrix Editor

▶ *Arithmetic operations:* The buttons for rounding and linear combination of matrices and vectors now work correctly. (**9218**)
▶ *Old matrix editor:* (1) Upon closing a matrix the reference in the list of open matrices is removed. (2) Code files are now displayed correctly. (**9187**)

Demand Operations

▶ *Demand procedures:* The procedures can now be applied independently of existing add-ons. (**9220**)

Network Editor

▶ *Version comparisons:* A suffix is now added to user defined attributes (same as for other attributes). (**9208**)

PrT Assignment

▶ *LUCE using an existing assignment as initial solution:* The procedure will no longer produce instable results which used to occur in certain cases. (**9171**)

VISUM Files

▶ *Open / Save procedure parameters:* An entry is written in Trace.txt when a parameter file (.xml or .par) is opened / saved successfully. (**9228**)
▶ *Project directories files:* pfd files can now also be read when they contain additional whitespace. (**9217**)

11.50-03	Corrections, Bug Fixes and New Features (ID)	2010-08-16

COM Interface

▶ *SetMultiAttValues:* This method checks the validity of the index ([x,0] in the first place of the array). (**9201**)
▶ *Log files:* The COM methods WriteToTrace and WriteToError add a line break to complete the generated entry. (**9164**)

Data Model

▶ *Matrix cache:* In certain cases, defragmentation of the matrix swap file caused a program crash. This bug could be fixed. (**9181**)
▶ *Edit line route shape:* The program no longer crashes when the line route is lengthened. (**782**)
▶ *Line blocks:* The program will no longer freeze (endless loop), if the pre and post preparation times of vehicle journey sections are reduced, though a shorter time had been set manually for the the layover block items in the line blocks before. (**9186**)

Dialogs

▶ *Column Charts:* Attributes with an ID consisting of one character only may be used as label for x-axis (used e.g. for russian short name of link attribute 'NO'). (**9169**)
▶ The program will no longer freeze (endless loop) if a warning or an error message appears in the process window of a separate thread while the procedure is running. (**9182**)
▶ *Shapefile export:* Unlike the regular mode, the OK button is initially selected in the attribute selection dialog and the Cancel button aborts the operation. (**8662**)

Difference Network

▶ *Network merge mode:* Merging the networks works now while a list of user-defined paths is open. (**9190**)

PuT Passenger Survey

▶ Read passenger onboard data from file (either data format): The program will no longer crash, if the target network is empty. (**777**)

Timetable Editor

▶ The Screenshot functionality now works in the timetable editor, too. (**9194**)
▶ *Set PuT line selection via COM:* Setting the line selection for the timetable editor via COM does

not produce invalid sequences of stops or stop points. (**9183**)

Filters

▶ *Group filter:* The filter state is now updated when an object is created. (**779**)

Graphical Operations

▶ *Flow bundle:* The flow bundle is recalculated again after changes to the OD pair filter. (**9199**)

Listings

▶ *Goodness of PrT assignment with ICA list:* In certain cases, the program used to crash when assignment results were discarded while the list was open. This bug could be fixed. (**9168**)

Matrix Editor

▶ Via the filter icon in the matrix editor toobar, filtering can globally be switched on or off. (**9178**)
▶ *Multi-matrix processing:* Operations on matrices, which themselves are the second operand for other matrices, are performed at last. In this way, the operation regards the original value of the operand. (**8584**)
▶ *Matrix histogram:* Interval files in old format (extension .cod) can now be read. (**9166**)

Network Editor

▶ *Edit zone shape:* The program will no longer freeze (endless loop), if the user clicks a polygon point that belongs to two adjacent polygons while holding down the CTRL and SHIFT keys. (**9144**)
▶ When aggregating lines, all line routes that can be aggregated are now actually aggregated in one procedure run – independent of the order of the IDs. (**7487**)
▶ Like in web browsers, the keyboard can be used now to navigate in the view history, i.e. the key combinations Alt - Arrow left and Alt - Arrow right can be applied. (**8451**)

PuT Operating Indicators

▶ Saving version data to file works correctly even if the network includes PuT operating indicators for Territory x […] x Vehicle combination, though some entries do not have a vehicle combination. (**9191**)

Other Operations

▶ All procedures will warn interactively if an error occures. Wanrnings will also be logged in trace- and error-files. (**9153**)
▶ The procedure Linear combination of matrices and vectors has been implemented in the matrix editor and also in the matrix browser, UNDO can be applied in either case. Target matrices can be among the source matrices. (**9170**)

Miscellaneous

▶ *Open version via double-click:* When a version file is opened by double-click in the explorer, the file name spelling (upper and lower case) is retained. (**9176**)
▶ Reduced memory fragmentation after assignment calculations. (**8050**)

PrT Assignment

▶ *PrT assignment with ICA:* The assignment is now considered to have reached convergence only if the internal assignment (Equilibrium_Lohse or Equilibrium assignment) has reached convergence, too, and was not terminated because the maximum number of iterations had been reached. (**9172**)
▶ Deleting PrT assignment results for multiple demand segments has been accelerated. (**9188**)
▶ *LUCE with warm start:* The procedure returns sufficient volumes now even if traversed network objects were blocked in the initial solution. Results are not fully stable numerically, but this issue will be addressed shortly. (**9197**)

PuT Assignment

▶ *Connection import:* Even if an error occured, the process window is closed (for example, if the file to be imported does not exist). (**9167**)
▶ *Connection import:* VISUM now rejetcs path legs using time profiles backwards. (**9206**)

Add-In

▶ *Balance matrix:* The user is now notified if the matrix contains invalid values. (**9087**)
▶ *Add-In 'EVA Auswertung':* No crash if EVA-Demandmodel is incomplete (**9135**)

COM Interface

▶ Interactive deletion of current network is prohibited if COM references to network objects exist. (**9081**)

Data Model

▶ The growth of the matrix swap file is decreased much. (**8839**)
▶ *Emission calculation according to HBEFA:* If a fleet composition has no subsegment with a positive weight, this results in a uniform distribution of all segments of the selected categories in the calculation and in the linear combination of fleet compositions. (**8988**)
▶ *Lines:* The transport system of a line can be changed at any time. Where required, network objects to be opened (links, turns, stop points) will be adjusted. (**6771**)

Dialogs

▶ Dialog "Comparison of stop and run times" does not crash any more if only active objects are displayed and filtered by system routes (**9157**)
▶ *File names:* When using the 'Open' or 'Save as' command, the default extension of the respective file type is added to file names which do not have a valid extension yet. If, in the project directories, a '*' has been entered for the file type, any extension is permitted. In this case, no additional extension is added. (**6082**)
▶ *Forced chainings dialogs:* In the Forced chainings dialog and in the wizard to define new forced chainings, the column selection for the table can now be set. The columns with calculated departure, arrival and valid days are always displayed. (**9075**)
▶ *Edit stop dialog:* The specific walk and wait times between time profiles are displayed correctly. (**9131**)
▶ *Tooltips:* Tooltips with umlauts are translated correctly on operating systems with a 'foreign' codepage. (**9099**)
▶ *Blocking back model:* The input field for the average space required per car unit now also handles imperial units correctly and full stop or comma as decimal separators. (**9107**)

Timetable Editor

▶ *Line block view:* The printout is positioned better than before. (**9092**)
▶ Context menu entries in the timetable editor which refer to marked vehicle journeys are grayed out, if nothing has been marked. Context menu entries that require further user input are identified by "…", as usual. (**9121**)
▶ *Parameter dialog for line block display:* The combobox of block versions for the determination of unbound actions is sorted numerically by the block version number. Furthermore, the previous block version selection can be restored more often than before when reopening the dialog. (**9078**)
▶ *Wizard to define forced chainings:* A progress dialog is displayed when determining the possible targets. The determination can be cancelled. In this case, any already determined targets will be displayed. (**9076**)

Filters

▶ *Filter on vehicle journey items:* vehicle journey items are passive, if their vehicle journey is passive. This could be wrong if the journey was passive, because of a filter on vehicle journey sections (**8697**)

Foreign Formats

▶ *Shapefiles:* Z- coordinates of nodes are now exported/imported correctly. (**9097**)
▶ PolygonM+Z behave just like Polygon. The z-coordinates/the measured value cannot be used in EdgePoint and are thus discarded. (**4362**)

Graphics

▶ *Legend:* When scaling path bars, the legend now also displays the specified attribute. (**9120**)
▶ The initial graphic parameters classification is calculated from existing classes (**9126**)
▶ Text labels of print frames can have multiple lines and are wrapped automatically (**7179**)
▶ *Editing classifications:* If you edit an existing classification, the current color gradients are transferred to the dialog as far as possible. (**8870**)

- *Lists: The correct font size is set when printing (so far:* the font size of the header). (**9091**)
- *Line bars:* the aggregate function "weighted mean" also regards the first attribute value now (**9141**)

Junction Editor

- If you set the display language to Russian, the labels of the radio buttons ('legs', 'lanes') and check boxes ('Major flow manually') are now displayed in full. (**9110**)

Matrix Editor

- *Integrated matrix editor:* Row and column sums are now available. (**9158**)
- Standalone matrix editor ("Muuli"): Changing options and saving of changed matrices works again. Also creating and editing a code file works again. (**9163**)
- *External matrices:* The initialization of external matrices no longer leads to a crash. (**9105**)

Demand Operations

- *EVA mode choice:* If balancing is not possible in the network yet demanded in the procedure parameters, this is changed when opening the parameters dialog. A message is issued concerning the modification in the procedure parameters. (**9045**)
- *Estimating gravitation parameters:* You can now also add an interval via COM. Furthermore, a characteristic of the enum ProtocolSaveTypeT has been changed once more. (**9103**)
- *VISEM combined:* The transformation of the utility matrix is calculated after LogSums now (was calculated too early) (**9137**)
- *Procedure parameters for demand distribution dialog:* On the 'Function graph' tab, the parameters estimated with the Kalibri procedure are displayed, if the respective 'Apply estimated parameters' option has been set. (**9100**)
- *Estimating gravitation parameters and TFlowFuzzy:* It is possible to read interval-Att-files for the procedures (**9101**)

Network Editor

- *Demand segments:* VISUM no longer crashes when discarding line costing results, for example due to the creation or deletion of a new demand segment. (**9124**)
- *Transport system:* When inserting a transport system, another transport system can be specified. From this transport system, the trafficability of the network and other transport system-dependent attributes are copied. (**9047**)

Other Operations

- All procedures will warn interactively if an error occures. Wanrnings will also be logged in trace- and error-files. (**9153**)

Miscellaneous

- VISUM now starts even if UAC is activated, user has no admin permission and a scriptmenu entry for 'Computer' exists. (**9116**)
- VISUM respects HIGH DPI (120 DPI, 144DPI) (**8187**)
- Procedure "Save Version" occasionally generated a confusing warning if the filepath wasn't valid. (**9132**)

PuT Line Blocking

- *Line blocking with vehicle interchange:* The procedure can generate blocks with predetermined secondary properties (long/short blocks, distribution of the layover times), just like the procedure without a vehicle interchange. (**7752**)
- *Line blocking with vehicle interchange:* The procedure converges further than before, so that better solutions are found. In addition, the procedure has been accelerated. (**9112**)

PrT Assignment

- The Tribut learning procedure has been accelerated considerably. (**9114**)
- *LUCE assignment procedure:* The procedure can now build on an existing result from previous runs. (**8941**)

PuT Assignment

- *Connection files:* The export and import of connection files has been parallelized. (**7352**)
- *Headway-based assignment:* In case of lines operating in parallel, only the last stop of multiple

equivalent stops is used for transfers. (**9129**)

VISUM Files

▶ Conflict avoidance works correctly if signal groups are read additionally from a network file (**8075**)
▶ *Network writing:* If "only active" is selected, only couple sections are written which have active couple section items (**9090**)
▶ *Additive network reading:* The 'Cancel' option as conflict handling for line route or time profile items led to a termination of the additive network reading. So far, the effected items were overwritten in this case. (**765**)
▶ *Model transfer file:* The model transfer file now contains less central types from the network file and the demand file. (**8847**)
▶ *Saving a network:* In the "Save only active network objects" mode, the program only exports time profile transfer times that belong to active time profiles. (**9142**)

TFlowFuzzy

▶ Correct shares of the given matrix are now calculated, when selecting the 'Shares due to the matrix' option. (**9143**)