VISUM Release Notes

Version 12.0

Version 12.01-00
Last modified: 2011-11-29

Add-In

- ▶ *Script menu files:* Script menu files storing script menu configuration settings can now be read additively. In this case, the entries are added to the existing script menu. (**10508**)
- ▶ Additionally, the HTML Help files are available in PDF format now. (**1944**)
- ▶ *New add-in:* With the new add-in it is now possible to add the correct paths for the PythonModules folder to the paths stored in the sys.path file. (**10158**)
- ▶ *VISUMPy.Matrices, function readBIMatrix:* Reading binary mtx files did not work correctly with external matrices which had been created in VISUM and were saved as mtx without any changes to the matrix values. This bug could be fixed. (**10477**)

COM Interface

- ▶ *Classified line bars:* Now, also the COM interface supports the line bar classification. Furthermore, the classification settings can be adjusted via an 'Edit' button like any other settings. (**10178**)
- ▶ *IExecuteScriptPara:* An access method from Ioperation to IExecuteScriptPara has been added. In this way, access to the 'FileName' attribute is provided. (**10284**)
- ▶ *GetNearestLink:* The COM interface has been extended. Now, a cache can be activated for the execution of the method GetNearestLink. Using this cache will significantly accelerate the method execution if it is called repeatedly. (**2346**)

Data Model

- ▶ *System routes:* Even if either the start stop point or the end stop point is a directed stop point on a link, the opposite direction of a system route can now be created in the same way as the opposite direction of a line route. (**9386**)
- ▶ *Adjustment of coupled time profiles:* The time data of a coupled time profile is adjusted correctly now even if a time profile item's arrival time is edited and if later in the course of the time profile a coupled section starts with different dwell times of the coupled time profiles at the start of the coupled section. (**10463**)
- ▶ *Propagation:* The propagated link volumes without regard to count values can now be output. (**10451**)
- ▶ *User-defined attributes:* The values of user-defined attributes of the network could not be edited. Now they are subject to changes. (**10485**)

Dialogs

- ▶ *Procedure parameters windows:* The parameter windows for the demand modeling procedures (4 stage model, VisEVA and Tour-based model) were updated. Now, the data of all demand strate is displayed simultaneously. Aggregation in the list makes it possible to compare the settings by demand stratum easily. (**6202**)
- ▶ *Attribute selection in the 'Save network' window:* In the context menu, the commands "Check displayed attributes" and "Uncheck displayed attributes" work correctly now. (**10488**)
- ▶ *'PuT lines / Line routes' window:* The current selection is now reset if the 'Initialize' button is clicked in the 'PuT lines' mode. (**10490**)
- ▶ *Filter windows:* In some cases, the new value was not regarded if a criterion had been changed from '= attribute' to '= value'. Furthermore, the program might have crashed if a deleted user-defined attribute was used in the right-hand section of the filter criterion settings. Either bug could be fixed. (**10506**)
- ▶ Procedure settings for skims (PrT and PuT): In the table, Copy&Paste works correctly now also for single cells. Though the value display used to be updated in previous versions, the pasted value was not stored with the data model. (**10450**)
- ▶ *Edit time profile:* The list of vehicle combinations is now sorted by number. (**10461**)
- ▶ *Comparison of run and dwell times:* Actions like "from dwell time for all" will no longer discard the 'cross' flags in the first column of the grid. (**10460**)
- ▶ *Dialog 'Edit time series':* Weights and percentages are now shown including decimals. (**10445**)

Timetable Editor

- ▶ *Text size in the 'Regular services' mode:* In columns which have not been marked the standard font and text size is no longer used. Instead, the graphic parameter settings for active unclassified objects are used. (**10500**)
- ▶ *Sequence of stops:* With a new option in the timetable editor, stops which are not served (i.e. non-

profile points of the selected time profiles) can be excluded from the sequence of stops view. (**9345**)

▶ *ITimetableEditor:* Via the COM interface, the new option 'Hide stops without stop event' in the timetable editor's sequence of stops is now available as method HideUnservedStops. (**10424**)

Foreign Formats

▶ *Read shape file as stop points:* The program will no longer crash if the shape file is read as stop points though the network does not include a node or stop point, respectively, with the given number. (**10462**)

Graphics

▶ *Graphics parameters for line bars:* The program will no longer crash, if operators are created or deleted after changes to the default order of line bar drawing. (**10044**)

▶ *Auto zoom in the page preview:* If 'Auto zoom' is called for an object which is located outside of the currently displayed area, the query 'Would you like to close the page preview for map section display?' will appear. (**10473**)

▶ *Bars, attribute 'Round to':* Since VISUM 12, this attribute has not been stored with the graphics parameters or version file. That is why the settings used to get lost. This bug could be fixed. (**10480**)

▶ *Drawing POI connections:* Via a new option, drawing can be reduced. Only the connections of active POIs are drawn in this case. (**10464**)

Graphical Operations

▶ *PrT flow bundle:* The flow bundle evaluation will no longer ignore the first link of a PrT path. (**10492**)

Junction Editor

▶ The program will no longer crash if the transport system property of links is edited. (**10518**)

Matrix Editor

▶ *'Projection' in the matrix editor:* In the 'Parameters' window of the procedure, the table did not show all of the rows. This bug could be fixed. (**10478**)

Demand Operations

▶ *'Demand matrix calibration' procedure:* The variant 'Standard-Kali' used to calculate incorrect values if there were more than one path per OD pair. This bug could be fixed. (**10484**)

Network Editor

▶ *List - network editor synchronization:* Strap courses which have been marked via the matrix toll list are now updated in the network display as soon as a link is closed in the toll system and the strap course has to be recalculated for that reason. (**9835**)

▶ *Model transfer file display:* POIs are displayed in separate tables by category. Hierarchical display shows the matrix entries not only via tooltip, but also in the tree. The whole tree can be copied to the clipboard. (**9897**)

PuT Operating Indicators

▶ *Include territory-based indicator calculation:* Optionally, the procedure can now return PuT-related indicators which had to be calculated by the territory-based indicator calculation procedure in previous versions. (**10328**)

Miscellaneous

▶ *Online Help:* Now, the context-sensitive help can also be called in the 'Transport systems/ modes / demand segments' window. (**10493**)

Scenario Management

▶ *Dependecy of modifications:* If modification A depends on B, an exclusion between A and B cannot be defined now. (**10491**)

PuT Line Blocking

▶ *Layover time within a vehicle journey:* Optionally (via a line block version attribute), taking the minimum layover time (pre and post processing times) into account can be disabled for the

transitions between the vehicle journey sections of a vehicle journey. (**10509**)

PrT Assignment

▸ *TRIBUT assignment and flow bundle:* The program will no longer crash during the PrT flow bundle calculation after the assignment procedure TRIBUT with area toll. (**10512**)

VISUM Files

▸ Route import (*.RIM): The program will no longer crash if routes with volumes per time interval are imported. (**10495**)
▸ *Network file, table 'User-defined attributes':* Definitions of UDAs can now be read from file in the 'Overwrite object' mode, even if both the minimum and maximum value columns are missing. (**10519**)
▸ Extended route import (*.RIM): Now, routes via main nodes are correctly imported even if the entry cordon node differs from the exit cordon node. (**10527**)
▸ *Network file, table 'User-defined attributes':* Definitions of UDAs with a standard value smaller than zero are now correctly read from file. (**10510**)

12.00-03	Corrections, Bug Fixes and New Features (ID)	2011-11-12

Add-In

▸ *RunVBA:* Warnings which might stop the procedure will no longer appear. (**10360**)
▸ *VisumPy.Matrices:* If the destination main zone number is zero for a zone, it will not be aggregated. (**10436**)
▸ *Calculate Matrix Aggr function:* The program will no longer crash if a zone cannot be allocated to a main zone. (**10374**)

COM Interface

▸ *Histogram, reading interval data:* Changes to the interval limits affect all matrices now, not just a single one. (**6160**)
▸ *IDemandTimeSeries:* Changes to the attribute 'TimeSeriesNo' now have an effect when the procedure is subsequently executed. (**4075**)
▸ *IPrTDemandSharePara, SetDemandShare:* In rare cases, using this function could have caused different behavior. (**10392**)
▸ Only for the attribute selection window display, VISUM is placed on top and gets the focus now. (**10369**)
▸ *SVG export:* VISUM will no longer crash if a path is specified for the SVG export which does not exist. (**10355**)
▸ *IOperation::Filename:* The attribute 'filename' returns the filename now instead of an empty string. However, the attribute remains obsolete. (**10359**)

Data Model

▸ *Line block response to forced chainings:* Less line blocks will now receive a forced chaining fault if forced chainings are defined. (**7303**)
▸ *Stop points:* The new attribute 'IsTerminalForVehicleJourneySection' indicates the final stop points in terms of line blocking. (**10289**)
▸ *Deleting main zones:* The program will no longer crash if one of the partial zones consists of an open polygon by mistake. This bug could be fixed. (**4578**)
▸ *Attribute 'Number of service trips proportional':* This VISUM 11.5 attribute had been renamed for VISUM 12, but mapper settings had not been defined. Thus it could not be selected in lists or for graphical display, for example. Now, the required settings have been added. (**10370**)
▸ *Reading user-defined attributes:* The default value 1 (true) is no longer ignored for UDAs of the Boolean type. (**10375**)

Development Components

▸ *SATURN import:* In previous versions, freeflow daten in section 3 under Dutch format used to be ignored, if the entry in section 1 record 2B is empty apart from the link index. This bug could be fixed. (**10223**)

Dialogs

▸ *User-defined attributes:* The message 'Please enter an integer between 0 and 9' no longer appears when existing UDAs are edited. (**10376**)

- ▶ *Procedures matrix aggregation / disaggregation:* If the network does not include a main od matrix, the (empty) matrix selection window will not open but a message will be displayed. (**10383**)
- ▶ *Deleting an alias:* A warning message is no longer returned. (**10402**)
- ▶ *'Create vehicle journey' window:* The focus is now in the 'Name' entry field, when the window is opened. It used to be in the 'Number' field. (**10459**)
- ▶ *Alias management window:* Also indirect attributes are provided for the alias definition. Furthermore, only the preset entries can be selected in the list of attribute interfaces, editing is no longer possible. (**10427**)

Timetable Editor

- ▶ *Edit graphic parameters:* In some networks, opening this dialog caused a program crash. This bug could be fixed. (**10387**)
- ▶ *Sequence of stops:* With a new option in the timetable editor, stops which are not served (i.e. non-profile points of the selected time profiles) can be excluded from the sequence of stops view. (**9345**)
- ▶ *Line block view:* Forced chainings following block items which exceed one day are now correctly displayed. (**10444**)

Foreign Formats

- ▶ *SATURN:* Now, U-turns are closed by default. (**10404**)
- ▶ *SATURN, penalty logics:* Section 44444 does no longer edit the link attribute v0. The minimum of the penalties is saved as the user-defined attribute SATURN_TIMEPENALTY. (**10430**)
- ▶ *Access database format accdb:* In VISUM, also the accdb database format of Access 2007 is supported for data import and export. (**9147**)
- ▶ *SATURN, logging:* The message output during the import has been improved (only relevant messages are returned). (**10429**)
- ▶ *SATURN, attribute SATURN_V_CAP:* The attribute SATURN_V_CAP is now correctly read from section 33333. (**10428**)
- ▶ *SATURN, reading PuT line data:* Now, the import can also handle data with parameter EZBUS set to TRUE. (**10405**)
- ▶ *Open database:* Now also those tables can be read from file, whose names have been changed meanwhile in VISUM. (**10394**)
- ▶ *SATURN, coordinates multiplicator XYUNIT:* In all cases, this value is read-out correctly now. (**10412**)
- ▶ *SATURN, signal groups:* Signal group data is now completely read from file. (**10413**)
- ▶ *SATURN, lines and line routes:* Lines and line routes of more than two public transport systems can now be read from file. (**10420**)

Graphics

- ▶ *Layer 'Lane allocation':* The graphic parameters are correctly adjusted now after the deletion of a transport system, and the program will no longer crash in this case. (**10437**)
- ▶ *'Edit graphic parameters' window:* The program will no longer crash after mouse-click on 'Bars', if the settings included a volume bar and a non-visible flow bundle bar. (**4077**)

Listings

- ▶ *List cells of the 'File' type:* In cells showing an attribute of the 'File' type, the respective file can be opened from the list. This also applies, if relative paths are used. In this case, the project directory ' (**10466**)
- ▶ *Update after changes to the procedures:* Network object lists are no longer automatically updated after changes to the procedure parameter settings. (**10400**)
- ▶ *Reading data from attribute file or pasting data from clipboard:* Either operation runs much faster now. This refers to object types with numerous sub-attributes. (**10388**)

Matrix Editor

- ▶ *Quick view / external matrices:* After removing an external matrix (by closing the editor) the matrix values were still shown in the quick view window. This could cause crashes. This bug could be fixed. (**10366**)

Network Editor

- ▶ *Connecting line routes:* For connected line routes with more than one time profile, too many of these used to be deleted. Now, time profiles with identical names are connected to each other and

will no longer be deleted. (**3108**)

▶ *Editing the shape of coupled line routes:* In certain cases, either optional re-routing of the coupled line routes was not provided or the simultaneous re-routing of coupled line routes caused a program crash. This bug could be fixed. (**10389**)

▶ *Aggregate isolated nodes:* The program will no longer crash if one of the executed work steps is only permissible under certain conditions (i.e. demand required). (**10352**)

Network Comparisons

▶ *Selection of attributes for version comparisons:* Now, the mandatory attributes are included if attribute groups are selected. (**10367**)

Other Operations

▶ *Matrix aggregation / matrix disaggregation:* The program will no longer crash if a matrix is deleted to which either procedure refers. (**10419**)

▶ *Network check, option 'Viability for ICA':* Warnings which refer to pure PuT lane turns will no longer appear, since these lane turns are not relevant to ICA calculations. (**4540**)

Scenario Management

▶ *Closing the 'Procedure sequence' view:* The window is closed before the scenario calculation is saved. Thus, the network window will appear immediately when the result version is loaded. (**10371**)

▶ *Skim aliases:* When aliases are defined for skims, the attribute name entry field is now automatically preset. (**10377**)

▶ *Base version modifications and check:* By mistake, the base version used to be overwritten even if the base version check returned an error after modifications, when 'Check and finish the modifications' was executed. This bug could be fixed. (**10409**)

PrT Assignment

▶ *LUCE procedure:* If for a mesh a user-defined VDF is used which does not calculate in [PCU], no longer TSys-comprehensive balancing will be performed to reach the proportionality. (**9830**)

▶ *'Goodness of PrT assignment' list:* The program will no longer crash if a PrT assignment with a filled list is available and the code of a demand segment is subsequently edited and another assignment is then calculated. (**10403**)

▶ *ICA, signalized nodes, HCM 2000:* For turns with volume = 0 on shared lanes, no longer the value 0 is automatically set for tCur and capacity. Now, appropriate values are set. (**10353**)

▶ *ICA, two-way stops:* If the turn types in the major flow are inconsistent, an error message will appear (instead of a warning in previous versions), and the calculation will not be executed. (**10426**)

PuT Assignment

▶ *Timetable-based:* For the shortest path search, the extension was added (as preceeding time slot) to the assignment time interval by mistake. If start and end overlapped thereby, incorrect assignment results use to be returned. (**10407**)

▶ *Connection file including fare data:* The assignment takes the current setting of the option 'Distribute supplements to transport systems' into account now. (**10408**)

Procedure Sequence

▶ *Moving a group:* Now, moving is okay even if the goup is moved downward and the subsequent group consists of just a single entry. (**10349**)

▶ *Read procedure parameters (XML) additively:* The program will no longer crash, if the 'Procedure sequence' window is open while the XML parameters are being read additively. (**10431**)

▶ *Closing the 'General procedure settings' window:* The program will no longer crash if the OK button is clicked while in the background the 'Procedure sequence' window is open with groups in the listed procedure sequence. (**10361**)

VISUM Files

▶ *PuT operating indicators for time profiles:* Compared to reading indicators from file, the indicators used to be written in a different order. Thus, the indicator values were not allocated to the appropriate time profiles. This bug could be fixed. (**4615**)

▶ *Read network data additionally:* Reading old network or demand data no longer creates a fare system and allocates it to the PuT lines automatically. (**4624**)

- ▶ *Saving version files:* The program will no longer crash, if the version is saved to file with separate Smart Map graphics parameters for line bar display. (**10363**)
- ▶ *Network reading for aliases:* In previous versions, aliases with relations that had been renamed meanwhile in the attribute IDs were ignored without comment. Now, the new names are allocated. (**10364**)
- ▶ *Reading network / model transfer file:* Warnings used to be recorded in the error.txt file and did not appear on the screen. Now, these warnings are stored in the trace.txt file. Thus, no irritating error messages will be displayed in the scenario management. (**10368**)
- ▶ *Network file, line routes and system routes:* The detour factor test will no longer apply the Euclidian length if a projection is used. Furthermore, projections are now regarded for the following: in PuT path lists, in the matrix toll list, for access node definition, in PuT interlining matrices, and for the direct distance calculation between two (main) zones. Thus, TRIBUT assignments might return deviating results if a projection is used and the particular procedure parameters are set in a way, that the value of time depends on the direct distance. (**10432**)
- ▶ *Couplings in model transfer files:* Modified couplings or coupled time profiles in model transfer files are handled correctly now. (**10440**)

12.00-02	Corrections, Bug Fixes and New Features (ID)	2011-10-16

Add-In

- ▶ *Add-ins:* In selection lists, the numbers of matrices are viewed as integers now. (**10329**)
- ▶ *'Calculate Matrix' add-in:* No error will be returned, if the text includes a reference which complies with the recent target matrix. (**10287**)

COM Interface

- ▶ *Various COM methods with parameters:* In previous versions, the check for the correctness of the VISUM objects that were committed as parameters to COM functions (for example, netReadRouteSearch and AddNetRead in IVisum.LoadNet) was not sufficient. (**10331**)

Data Model

- ▶ *Formula matrices:* Changing the data source type from 'formula' to 'data' will no longer cause matrix data loss. Instead, the data will be transferred. (**10325**)
- ▶ *Formula matrices:* The program will no longer crash and corrupt formulas will no longer be generated as a result of changes to the ID of a user-defined attribute or to a demand segment which is referenced in the formula matrix. (**10337**)
- ▶ *Formula matrices:* Now, the number (key) of a matrix is subject to changes even if a formula matrix contains a reference to this matrix. (**10346**)
- ▶ *Relations to POIs:* Parallel to the existing relations to POIs (from links, for example) additionally new relations to the POIs of a category are now provided. (**2339**)
- ▶ *Vehicle journey adjustment due to line route lengthening:* Optionally, the dimensions of the vehicle journeys can now be retained. In previous versions, a vehicle journey from the line route start and/or to the line route end used to be lengthened accordingly from the new line route start and/or to the new line route end automatically when the line route was lengthened. (**10122**)
- ▶ *User-defined attributes:* If the properties "minimum and maximum values" were missing in the network file, the message "Minimum value exceeds maximum value" used to be returned and the UDA was not imported. This bug could be fixed. (**9207**)

Dialogs

- ▶ Trip distribution (4-stage model): If the procedure uses estimated parameters from Kalibri, then the Choice model window will now show the remaining editable parameters (alignment etc.) correctly. In previous versions, this did not work. (**10343**)
- ▶ *Overview dialog for Aliases:* In the Network menu, an Overview dialog is provided now for Alias Management in the network. (**8277**)

Installation

- ▶ *VISUMDbServer.exe:* In certain cases, the component VISUMDbServer.exe was not registered correctly. As a consequence, VISUM access to Access databases was not possible. This bug could be fixed. (**3254**)

Matrix Editor

- ▶ *Totals in formula matrices:* In the status bar, the sum is no longer displayed for formula matrices

since the computation requires too much time. (**10341**)

Network Comparisons

▶ *Save model transfer file:* The button "All tables off" provided for this operation used to switch off only the visible tables, i.e. those which were not empty in the current network. Now, this button affects all tables. (**10334**)

PuT Operating Indicators

▶ *Automatically calculated territory indicators:* For run time reasons, these PuT-specific indicators which had been provided automatically since VISUM 12 are no longer automatically calculated. In future (starting with the next binary version) you will have the option to activate this funtionality. (**10327**)

Other Operations

▶ *Territory-based indicators:* The procedure "Territory indicators" is much faster now. (**10326**)

PuT Assignment

▶ *Fare calculation:* From-to zone fares used to return incorrect values during the assignment due to the reverse order of path legs in this case. This bug could be fixed. (**3253**)
▶ *Headway-based assignment:* For the impedance clculation, the boarding, alighting and traversing fare points were sometimes read as seconds by mistake. This bug could be fixed, they are always read as minutes now. (**4507**)
▶ *Fare calculation:* The calculation was speeded-up in networks with numerous fare systems. (**1590**)

VISUM Files

▶ *Read network additionally:* The button "Create warnings for conflicts in the 'Ignore' mode" is also regarded for links and connectors. (**10316**)
▶ *Read network additionally:* The conflict handling 'Cancel' works correctly again for links, connectors, intermediate points and surface items. (**10342**)

12.00-01	Corrections, Bug Fixes and New Features (ID)	2011-09-29

Add-In

▶ *Add-ins in general:* German and English help items have been added to all add-ins. (**10021**)

COM Interface

▶ *Options.DecimalSeparator:* This function works correctly now. (**3250**)

Data Model

▶ *Attribute "Number of effective lanes":* For turns and main turns, this attribute used to return incorrect values, if lane turns existed which connected one lane to several lanes of the same exit leg. This bug could be fixed. (**10295**)

Development Components

▶ *SATURN Import:* The SATURN importer can read the free SATURN-FORMAT in "Section 5555" and considers the parameter "XYUNIT". (**10313**)

Dialogs

▶ *'Vehicle units and combinations' window:* The 'Vehicle combinations' tab can also be opened if the network does not contain any vehicle unit. (**10292**)
▶ *'Read network' pop-up progress window:* The bar update continues even when tables or individual table rows are ignored. (**9293**)

Timetable Editor

▶ *Line block display:* The line block display will no longer crash if undefined attributes are displayed as labels, e.g. 'Length until next occurance' for block items which have not been defined by the user. (**10290**)
▶ *Print output of the horizontal graphical timetable:* Even if there is a stop or stop point with a very long name, printing will no longer cut off the first hours in the "Entire image" mode. (**2940**)

Foreign Formats

▶ *HAFAS-Import:* Information about "main masts" in the file "Connections between stops" is now evaluated correctly. (**3239**)
▶ *HAFAS import:* Destination coaches are now included in the import. (**9338**)

Listings

▶ *Cross-section functions for indirect attributes:* The color of the column header and tooltip now indicates, that "cross-section" means the total sum calculated for indirect attributes. (**7199**)

Network Editor

▶ *'Edit line route' window:* The program will no longer crash if the timetable editor is called from the 'Edit line route' window of a line route without time profile. (**2901**)

Other Operations

▶ Impedance calculation at node (ICA): Pure public transport lanes are excluded by means of a filter. (**10260**)

Miscellaneous

▶ *Program start:* With any operating system, the projections are copied when VISUM is started. (**3237**)
▶ *Program start:* Even if the target folder does not contain projection files, the projections will be copied when VISUM is started. In this way, VISUM installations that have become defective due to #3237 are fixed. (**3238**)
▶ *Command line options:* There are new command line options for 'load version, execute procedures' and for 'load version, ecetude procedures, save version'. (**9544**)

Scenario Management

▶ *Modifications, procedure parameter sets:* Newly created modifications or procedure parameter sets cannot immediately be used in scenarios. (**10307**)

PuT Line Blocking

▶ Line blocking (with and without vehicle interchange): According to the setting of the task, line blocking could have ended up in an endless loop. This will no longer occur. (**10275**)

PrT Assignment

▶ Due to the accelerated impedance calculation, the equilibrium assignment is faster now. (**9466**)
▶ *Equilibrium assignment:* Now, even 0 outer iterations are permitted. Thus, only the route volumes have to be adjusted to the new matrix when starting from an initial solution. When not starting from an initial solution, the procedure works like an incremental assignment. (**10293**)
▶ *PrT functions:* The option for reproduction of results until VISUM version 11.02 with acceptance of an instable shortest path search is no longer available. Now, always the new and stable shortest path search is used. (**10296**)
▶ Impedance calculation at node (ICA): For the 'all-way' control type, the computation could be sped up. This also affects the assignment with ICA. (**9645**)

VISUM Files

▶ *Read network file:* The program will no longer crash if zones are read adaptively to the existing network while a 'Desire line' display is visible. (**10205**)