PTV GROUP

the mind of movement

COM Example

Key features: **COM, VBA, Python, C++, C#, Matlab, Java**

This example shows the basic syntax how to control VISSIM by COM using different programming languages. The example is provided for the programming languages:

- VBA   File: COM_example.bas[1]
- Python,   File: COM_example.py
- C++,   File: COM_example.cpp
- C#   File: COM_example.cs
- Matlab   File: COM_example.m
- Java[2]   File: COM_example.java, COM_example_utils.java

For further information see commends in the corresponding files. You can read all files by using a simple text editor.

[1]   To run the VBA script, open Microsoft Excel ➔ open Visual Basic for Applications and drop the COM_example.bas file per drag & drop into the Visual Basic for Applications Window.

[2]   For information about the COM-Bridge in Java, please see: COM Example - Java.pdf.

Commands included in the example:

- Connecting the COM Server => Open a new Vissim Window:
- Load a Vissim Network & Layout
- Read and set a Link Name
- Set a signal controller program
- Set relative flow of a static vehilce route of a static vehicle routing decision
- Set vehicle input & vehicle composition
- Set Random Seed
- Run a single step & run the simulation continuous
- Get the state of a signal head
- Get information about all vehicles in the network (4 methods)
- Set desired speed to a vehicle
- Putting a new vehicle to the network, move a vehicle and remove a vehicle
- Get a list of all simulation runs
- Get the results of Vehicle Travel Time Measurements, Data Collection & Queue length
- Saving a Vissim Network & Layout
- End Vissim