MATRIX OPERATIONS (COM)

Short description

Demonstration of matrix operations using the COM interface.

Requirements

Vissim modules
- COM interface
- Dynamic Assignment

- For Python scripting to be available, the following software needs to be installed on your computer:
  - PTV Vision Python (https://cgi.ptvgroup.com/php/vision-setups/)
    or a manual installation of Python including pyWin:
  - Python 2.7 or Python 3.7 (https://www.python.org/downloads/)
  - pyWin Build 218 or higher (http://sourceforge.net/projects/pywin32/files/)
- Library "NumPy" for Python (http://www.numpy.org/).
  For Python versions 2.7.9 or higher, this library can be installed through PyPi (https://pypi.python.org/pypi/numpy):
  - Open the Windows command line prompt
  - Type "<PYTHININSTDIR>\SCRIPTS\PIP" INSTALL NUMPY
    where <PYTHININSTDIR> needs to be replaced with the path of your Python installation directory (please ensure to include the quotation marks).
  - After the installation has finished, close the command prompt with EXIT

Objective

This example demonstrates some matrix modifications that are available through scripting. The sample script is started from the **Scripts** list by using the context menu command **Execute**. from the only script object. Starting the simulation is not required for this example.

The following matrix operations are included in the script:

1. Add a new matrix
2. Read and modify the matrix demand
3. Import a matrix from a *.fma file
4. Assign a matrix as input for dynamic assignment
5. Parametrize and run matrix correction
6. Delete a matrix

As a result, two more matrices are contained in the Vissim network after executing the script.