OPP\_ENV\_GUI application

This application provides a graphical user interface for the opp\_env command line tool.

The original project resides on github at <https://github.com/omnetpp/opp_env>

Here is the readme file from there: <https://github.com/omnetpp/opp_env/blob/main/README.md>

The idea is, that the user may wish to install one of the options listed in opp\_env list and the command will automatically deduce what omnetpp version and other tools such as the CORRECT VERSION of INET, Veins etc. Are needed, and automatically installs the CORRECT version of these tools, as not every version is compatible with every other version.

I want to bet a GUI with three separate drop-downs, one for „OMNeT++ version”, one for „INET Version”, and one for „other tools”. Making a selection in ANY of these dropdowns affects the available selections in other dropdowns, BASED ON THE COMPATIBILITY MATRIX that can be deduced.

You can use the opp\_env info command at the beginning to see what options are available and populate the dropdowns by parsing the available options the tool will output here.

Using the command “opp\_env info [name of the option selected]”, opp\_env will create an output that looks like this, telling you exactly, what other options are valid for a given item in opp\_env list.  
  
Command issued: (base) gabortabi@MacBook-Pro-3 omnetpp-6.1.0 % opp\_env info veins

Output of the command:

{start of command output}

veins-5.2: The open source vehicular network simulation framework.

Download URL: https://github.com/sommer/veins/archive/refs/tags/veins-5.2.tar.gz

Requires:

- omnetpp: 6.1.0 / 6.0.3 / 6.0.2 / 6.0.1 / 6.0.0 / 5.7.1 / 5.7.0 / 5.6.3 / 5.6.2 / 5.6.1 / 5.6.0 / 5.5.2 / 5.5.1 / 5.5.0 / 5.4.2 / 5.4.1 / 5.4.0 / 5.3.1 / 5.3.0

- inet: 4.2.10 / 4.2.9 / 4.2.8 / 4.2.5 / 4.2.4 / 4.2.3 / 4.2.2 / 4.2.1 / 4.2.0 / 3.8.1 / 3.7.1 / 3.7.0 / 3.6.8 / 3.6.7 / 3.6.6 / 3.6.5

Nix:

- packages: sumo

Available options:

- from-source-archive (default): Install from source archive on GitHub

- from-git: Install from git repo on GitHub

--------

veins-5.1: The open source vehicular network simulation framework.

Download URL: https://github.com/sommer/veins/archive/refs/tags/veins-5.1.tar.gz

Requires:

- omnetpp: 5.5.2 / 5.5.1 / 5.5.0 / 5.4.2 / 5.4.1 / 5.4.0 / 5.3.1 / 5.3.0

- inet: 4.2.1 / 4.2.0 / 3.6.5 / 3.6.6 / 3.6.7 / 3.6.8

Nix:

- packages: sumo python2

Available options:

- from-source-archive (default): Install from source archive on GitHub

- from-git: Install from git repo on GitHub

--------

veins-5.0: The open source vehicular network simulation framework.

Download URL: https://github.com/sommer/veins/archive/refs/tags/veins-5.0.tar.gz

Requires:

- omnetpp: 5.5.2 / 5.5.1 / 5.5.0 / 5.4.2 / 5.4.1 / 5.4.0 / 5.3.1 / 5.3.0

- inet: 4.1.1 / 4.1.0 / 3.6.5

Nix:

- packages: sumo python2

Available options:

- from-source-archive (default): Install from source archive on GitHub

- from-git: Install from git repo on GitHub

--------

veins-4.7.1: The open source vehicular network simulation framework.

**WARNING:** This version requires an older version of SUMO, which is not available in opp\_env. Please install the appropriate SUMO version (0.30.0) manually.

Download URL: https://github.com/sommer/veins/archive/refs/tags/veins-4.7.1.tar.gz

Requires:

- omnetpp: 5.3.1 / 5.3.0 / 5.2.2 / 5.2.1 / 5.2.0 / 5.1.2 / 5.1.1 / 5.1.0

- inet: 3.6.0 / 3.5.0 / 3.4.0

Nix:

- packages: python2

Available options:

- from-source-archive (default): Install from source archive on GitHub

- from-git: Install from git repo on GitHub

--------

veins-4.7: The open source vehicular network simulation framework.

**WARNING:** This version requires an older version of SUMO, which is not available in opp\_env. Please install the appropriate SUMO version (0.30.0) manually.

Download URL: https://github.com/sommer/veins/archive/refs/tags/veins-4.7.tar.gz

Requires:

- omnetpp: 5.3.1 / 5.3.0 / 5.2.2 / 5.2.1 / 5.2.0 / 5.1.2 / 5.1.1 / 5.1.0

- inet: 3.6.0 / 3.5.0 / 3.4.0

Nix:

- packages: python2

Available options:

- from-source-archive (default): Install from source archive on GitHub

- from-git: Install from git repo on GitHub

--------

veins-4.6: The open source vehicular network simulation framework.

**WARNING:** This version requires an older version of SUMO, which is not available in opp\_env. Please install the appropriate SUMO version (0.30.0) manually.

Download URL: https://github.com/sommer/veins/archive/refs/tags/veins-4.6.tar.gz

Requires:

- omnetpp: 5.3.1 / 5.3.0 / 5.2.2 / 5.2.1 / 5.2.0 / 5.1.2 / 5.1.1 / 5.1.0 / 5.0.1 / 5.0.0

- inet: 3.6.0 / 3.5.0 / 3.4.0

Nix:

- packages: python2

Available options:

- from-source-archive (default): Install from source archive on GitHub

- from-git: Install from git repo on GitHub

--------

veins-4.4: The open source vehicular network simulation framework.

**WARNING:** This version requires an older version of SUMO, which is not available in opp\_env. Please install the appropriate SUMO version (0.25.0) manually.

Download URL: https://github.com/sommer/veins/archive/refs/tags/veins-4.4.tar.gz

Requires:

- omnetpp: 5.0.1 / 5.0.0 / 4.6.1 / 4.6.0 / 4.5.1 / 4.5.0 / 4.4.2 / 4.4.1 / 4.4.0

- inet: 2.3.0

Nix:

- packages: python2

Available options:

- from-source-archive (default): Install from source archive on GitHub

- from-git: Install from git repo on GitHub

--------

veins-4.3: The open source vehicular network simulation framework.

**WARNING:** This version requires an older version of SUMO, which is not available in opp\_env. Please install the appropriate SUMO version (0.25.0) manually.

Download URL: https://github.com/sommer/veins/archive/refs/tags/veins-4.3.tar.gz

Requires:

- omnetpp: 4.6.1 / 4.6.0 / 4.5.1 / 4.5.0 / 4.4.2 / 4.4.1 / 4.4.0 / 4.3.2 / 4.3.1 / 4.3.0 / 4.2.3 / 4.2.2 / 4.2.1 / 4.2.0

- inet: 2.3.0

Nix:

- packages: python2

Available options:

- from-source-archive (default): Install from source archive on GitHub

- from-git: Install from git repo on GitHub

--------

veins-3.0: The open source vehicular network simulation framework.

**WARNING:** This version requires an older version of SUMO, which is not available in opp\_env. Please install the appropriate SUMO version (0.21.0) manually.

Download URL: https://github.com/sommer/veins/archive/refs/tags/veins-3.0.tar.gz

Requires:

- omnetpp: 4.4.2 / 4.4.1 / 4.4.0 / 4.3.2 / 4.3.1 / 4.3.0 / 4.2.3 / 4.2.2 / 4.2.1 / 4.2.0

- inet: 2.3.0

Nix:

- packages: python2

Available options:

- from-source-archive (default): Install from source archive on GitHub

- from-git: Install from git repo on GitHub

--------

veins-git: The open source vehicular network simulation framework.

Git URL: https://github.com/sommer/veins.git

Requires:

- omnetpp: 6.1.0 / 6.0.3 / 6.0.2 / 6.0.1 / 6.0.0 / 5.7.1 / 5.7.0 / 5.6.3 / 5.6.2 / 5.6.1 / 5.6.0 / 5.5.2 / 5.5.1 / 5.5.0 / 5.4.2 / 5.4.1 / 5.4.0 / 5.3.1 / 5.3.0

- inet: 4.4.1 / 4.3.8 / 4.3.7 / 4.2.8 / 4.2.5 / 4.2.4 / 4.2.3 / 4.2.2 / 4.2.1 / 4.2.0 / 3.8.2 / 3.8.1 / 3.7.1 / 3.7.0 / 3.6.8 / 3.6.7 / 3.6.6 / 3.6.5

Nix:

- packages: sumo

Available options:

- from-source-archive: Install from source archive on GitHub

- from-git (default): Install from git repo on GitHub

--------

Note: Specify `--raw` to `opp\_env info` for more details.

Note: Options can be selected by adding `--options=[PROJECT:]NAME` to the opp\_env command line, see e.g. `opp\_env install --help`.

{end of command output]

Using this information, determine which selections are valid from the various dropdowns (greying out those wich are not, but keeping them selectable). If the user selects anything in any of the dropdowns, rerun this process. There should be an “INSTALL SELECTED” button “Greyed out and unselectable if any of the three dropdowns has an invalid option selected”, and Green when all three options are valid.

NONE should be a valid option in the „INET Version”, and „other tools” dropdowns, at least one option should be selected in the „OMNeT++ version” dropdown and the default should be “omnetpp-latest”.

There should be a section where the user can specify which directory should be used for the installation, with a “browse” functionality.

This tool must run in the GUI as a standalone application on Linux, MacOS, and Windows. I propose a Python base for the application.