## Installation instructions for MPMAS 4.1 for MS Windows 10

A note ahead:

MPMAS has been written and designed mainly for use on Linux (see separate installation instructions). The Windows version misses some features like syntax highlighting, but is fully functional. It is mainly thought for trial, demonstration and teaching purposes and to develop smaller models. The Linux version offers advanced features for high performance and parallel computation and generally performs better.

## 1 Installing StrawberryPerl

The MPMAS model building tool mpmasql has been written in the programming language Perl. Since MS Windows does not ship with a Perl interpreter by default, this needs to first be installed. StrawberryPerl is the most widely used Perl distribution and is free.

1) Go to https://strawberryperl.com/ and download the latest 64bit version for Windows. (Unless you are sure your computer is only a 32bit computer.)

2) Double click on the msi file and follow the installation process.

If you are unsure, additional help can be found here: https://www.thomas-krenn.com/en/wiki/Installing\_Strawberry\_Perl\_in\_Windows

3) Check whether perl has been correctly installed:

a) Open the windows command line (Search for cmd in the Windows search function and run it: a black terminal window will open and show a prompt)

b) At the command prompt, type:

perl -v

and press enter.

You should see perl version information be printed on the screen.

## 2 Installing MPMAS:

1) Download the MPMAS package *mpmasql\_windows\_demo\_<version>.zip* from mp-mas.uni-hohenheim.de.

2) Extract and copy the contents into a directory of your choice. Ideally, something like C:\ MPMAS\.

3) Open the windows command line (Search for cmd in the Windows search function, run it, a black terminal windows will open.)

a) Change to the directory into which you have extracted the files, e.g. for C:\MPMAS

c: cd \MPMAS

b) Run the installation script (type and press enter)

install\_mpmas

(Note: This provides for the basic installation, useful e. g. for the tutorial and for class and for developing a basic model using csv or ods files as database. If you need more advanced support for SQL or SPARQL queries or Excel sheets, please see section 3.)

c) Installation will take a while. Answer questions on installing xlscat and similar which appear later during the installation process by pressing enter.

d) Close the cmd command line and open it again. Test whether mpmas and mpmasql have been properly installed by typing at the command prompt:

mpmasql -v

and pressing enter should give you output similar to this:

mpmasql v4.1.0

Model building toolbox for MPMAS Version: 4.1.0, last change: 28 Mar 2023 (c) Troost, C., Univ. Hohenheim, 2009-2023

## **3** Advanced installation options for MPMAS:

Installation of Perl modules may take quite a while, so the basic installation has been stripped down to install only the essential ones. This basic installation, which you will receive by running install\_mpmas without any options, is fully sufficient for the model examples used in the course and to build a simple example model.

If you later want to use MPMAS with MySQL or SPARQL queries or prefer to use xlsx rather than ods files [not recommended due to issues in the xlsx parsing module], you will have to run the installation for the required perl modules.

install\_mpmas --sql

installs MPMAS including the required modules for MySQL support.

install\_mpmas --sparql

installs MPMAS including the required modules for supporting RDF/SPARQL queries to sparql endpoints.

install\_mpmas --excel

installs including the required modules for reading xlsx and xls files.

install\_mpmas --allDb

installs MPMAS including MySQL, SPARQL and xlsx support in one (all of the above).