## Installation instructions for MPMAS 4.1 for Ubuntu 18.04 or 22.04

A note ahead:

If you want to use the MPMAS Linux version, but don't have a native Linux system, you can use VirtualBox to set up an Ubuntu system as an application within your host system (see separate documentation file for installing virtual box).

## **1** Installing MPMAS:

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

2) Extract the .zip file (can be done within ~/Downloads folder).

3) Open a terminal window (from the Ubuntu menu or by pressing Ctrl-Alt-T).

4) Change to the directory into which you have extracted the files, e.g. for ~/Downloads/mpmasql\_demo\_4100/

cd ~/Downloads/mpmasql\_demo\_4100/

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

sudo ./install\_mpmasql

(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 2.)

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

Once installation has finished you should see something like this:

Testing MPMAS call

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

Looks good

d) Test whether mpmas and mpmasql have been properly installed by typing the following at the terminal prompt:

mpmasql -v

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

## 2 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\_mpmasql --sql

installs MPMAS including the required modules for MySQL support.

./install\_mpmasql --sparql

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

./install\_mpmasql --excel

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

./install\_mpmasql --allDb

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