FUZZY LIBRARIES - INSTRUCTIONS FOR INSTALLATION (TO UPGRADE AN EXISTING INSTALLATION SKIP TO STEP 3)

These are the installation instructions for Ubuntu (Linux) and macOS. If you get any issue while installation process, please follow the mentioned "Notes".

- 1) [Ubuntu] Install Ubuntu and Java (version 8 preferable).
- 1) [macOS] Make sure that you have installed the command line tools for XCode (from App store), and some software management tool like homebrew or macports. These instructions are written for homebrew
- 2) [Ubuntu] Go to a terminal and execute the following instructions for installing all the needed tools as a standard user (with admin privilege by using sudo) but not as root user:
- \$ sudo apt-get install build-essential emacs rlwrap texlive texinfo imagemagick \$ sudo apt-get install ant ant-optional default-jdk
- 2) [macOS] Install emacs and ImageMagick (and texinfo if needed, but recent versions of Mac OS X include it):
- \$ brew install emacs-mac imagemagick

Install TexLive. If using homebrew we recommend installing the MacTeX distribution, available from: https://www.tug.org/mactex

3) [Ubuntu]

Note 1: If the CURL is not installed you can install the curl using the following command in both systems [MacOS/Linux]:

\$ sudo apt-get update \$ sudo apt-get install curl

Note 2: if a Ciao was already installed you will get an error for having already the master directory. You can delete it before from your directory. In my case for Linux:

\$ rm -rf /home/susana/.ciaoroot/master

After checking Note 1 and Note 2, execute:

\$ curl https://ciao-lang.org/boot -sSfL | sh -s -- --no-prebuilt get devenv

This command installs Ciao in the \$HOME/.ciaoroot/master directory. In my case /home/susana/.ciaoroot/master directory. The installation of Ciao will be completed.

4) [macOS] [Ubuntu] You should be able to call the compiler from the terminal (open a new terminal to check this):

```
$ ciao
Ciao 1.18.0 [LINUXx86_64]
?- halt.
```

If ciao command is not working:

Solution 1:

Step 1: \$ test -r ~/.bash_profile || echo 'test -f ~/.bashrc && source ~/.bashrc' > ~/.bash_profile

Step 2: restart the terminal and execute "ciao" command again.

Solution 2:

Step 1: sudo mv /etc/ImageMagick-6/policy.xml /etc/ImageMagick-6/policy.xml-bak

Step 2: restart the terminal and execute "ciao" command again.

5) Installing FuzzyProlog and Rfuzzy libraries from github:

If you have already installed the libraries, to upgrade to a new version delete the old version using the following commands and install new ones:

\$ ciao rm FuzzyProlog \$ ciao rm RFuzzy

At https://github.com/FuzzyLP there are available fuzzy libraries and applications that uses them. To install these libraries execute the following commands:

```
$ ciao get github.com/FuzzyLP/FuzzyProlog
$ ciao get github.com/FuzzyLP/RFuzzy
```

FLESE-V2 - INSTRUCTIONS FOR INSTALLATION

- 1) Install the following tools (necessary to try and develop the Java-based web interface):
- <u>Eclipse IDE for Java EE</u> (download e.g. eclipse-jee-neon-2-linux-gtk-x86_64.tar.gz)
- Apache TomCat 7 (download e.g.

download both and extract them in a directory (e.g., \$HOME/src/)

2) Download and uncompress https://github.com/FuzzyLP/UFleSe.git in any directory (e.g., \$HOME/src/AFleSe-master)

3) The AFleSe application will be downloaded including a ciao folder. You need to delete the ciao folder and then you can run the following command to get the ciao with updated paths.

cd \$HOME/src/AFleSe-master; ./prepare.sh

Or just by dragging the prepare.sh file into your terminal.

- 4) Now you are ready to open this project from the Eclipse IDE for Java EE. Open the IDE:
- select "Import existing project"
- select "Existing local repository"
- press "Add..."
- browse to reach \$HOME/src/AFleSe-master/flese
- press "Next", "Import existing Eclipse project", and "Next"

At this point the project source code should be visible from the IDE.

- 5) Right-click on the left side-panel and select "Run On Server". The first time it will ask you to choose one server. Select TomCat 7 from the Apache/ menu and navigate when required to the directory where you downloaded TomCat 7 (Version 7.52 preferable) (e.g., \$HOME/Downloads/tomcat7)
- 6) A local web server should be running at this point. Open http://localhost:8080/flese from a web browser and follow instructions.