

Coordinator: Omar N Boffil

NetID: Oboffil2

Oboffil2@illinois.edu

Group Name: Oboffil

Topic: Option 2.1 MeTa Toolkit

Project Topic: Enhance MeTA and Metapy usability

Metapy and its toolkit are among the best-known libraries used in python for Text mining and another usability. Still, this library is not compatible with all python versions, making it challenging to create an environment where you can use its power to build good code.

In this documentation, I will give you all the steps and code to create an environment using anaconda to install Metapy and other useful libraries that you can combine with Metapy to make your code more efficient. This process will use one of the most recent python versions that will benefit users who like to work in more updated environments and let you use newer python packages and combine them with Metapy. We will do this process as simple as possible and avoiding complicated code and frustration.

This documentation will work for Windows and macOS operator systems. Also, we will use anaconda GUI to make it as simple as possible. The code to install Metapy and its useful toolkit will be included in an anaconda file and a text file with all the libraries' needs.

To ensure that this software works and created the right result, make sure to read the code's comment, and follow the steps described below. This will guarantee the success of this environment for Metapy.

1) Installation process:

First, we will need to install anaconda if you don't have it yet. (In case you have it installed already on your computer, you can move to step 2). Otherwise, you will need to:

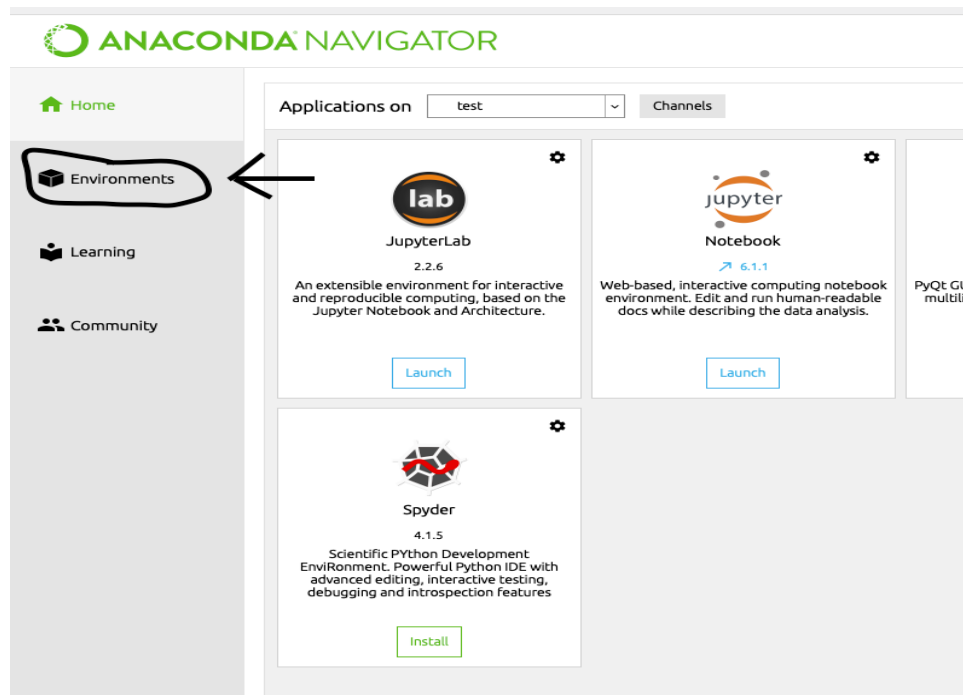
- 1.1) Go to <https://docs.anaconda.com/anaconda/install/>
- 1.2) Select your operator system for [Windows](#) or [macOS](#)
- 1.3) Follow the instruction on anaconda website to complete the installation by using the GUI or the terminal on your computer

After you have installed anaconda in your computer, we can move on and create an environment that works with Metapy

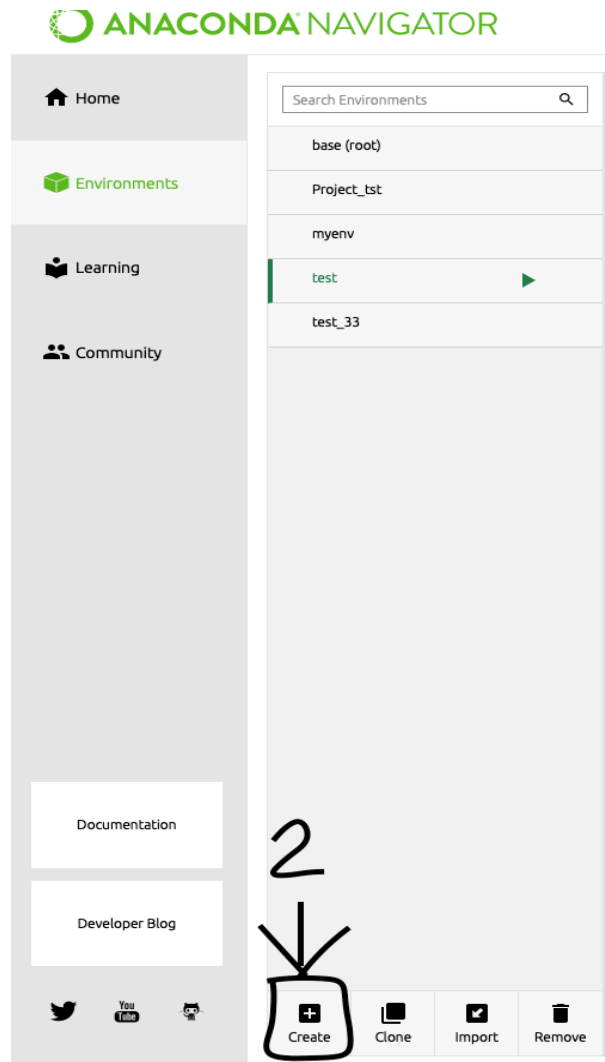
2) Creating an environment with Python 3.7.

Now that anaconda software is installed on your computer. You can open it and follows:

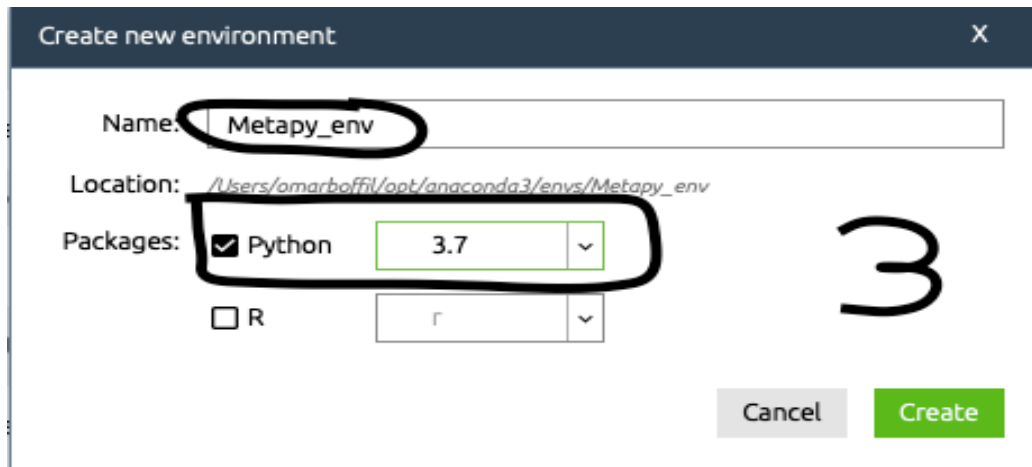
- 2.1) Click on “environment”



2.2) Click on “Create” to create a new environment where we are going to work



2.3) Add a name to your environment, select Python version 3.7, and click on “create”. This will take a few seconds, and it will create a python environment where you can start running code



3)- Getting the source code and resources:

Now that we created the environment with Python 3.7 we can implement the code that will let us use the different libraries, but first, we need to download the source code and packages from <https://github.com/oboffil/CourseProject.git>

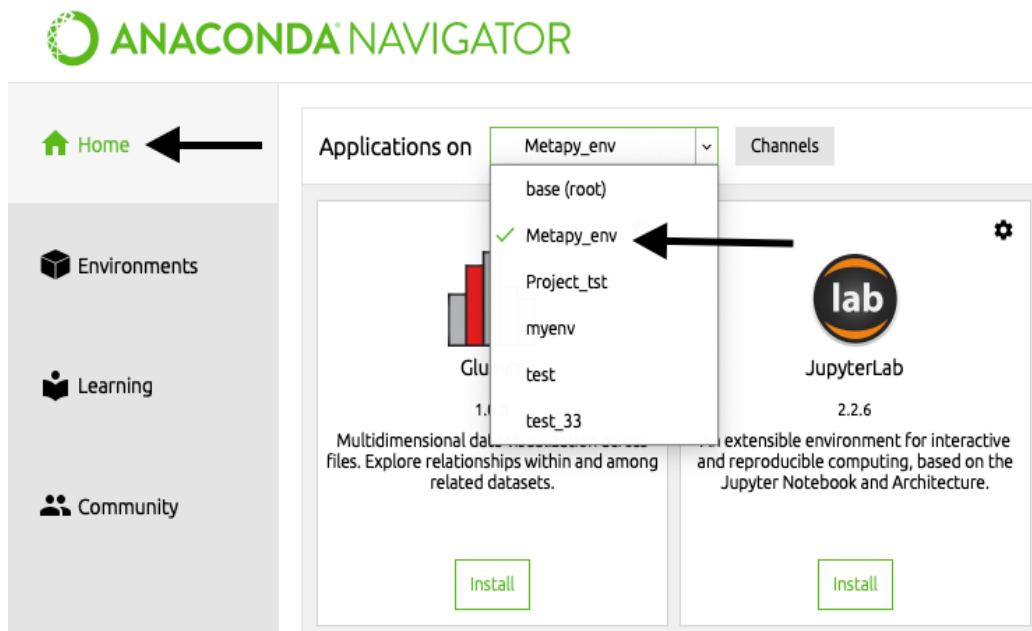
Download the [download resources.zip](#) from the repository above and unzip it to get the folder that contains the source code (Implementation.ipynb), and the text file (package-list.txt) with the Toolkit packages that will help you to set up Metapy and other useful libraries.

4)- Implementing the source code and packages.

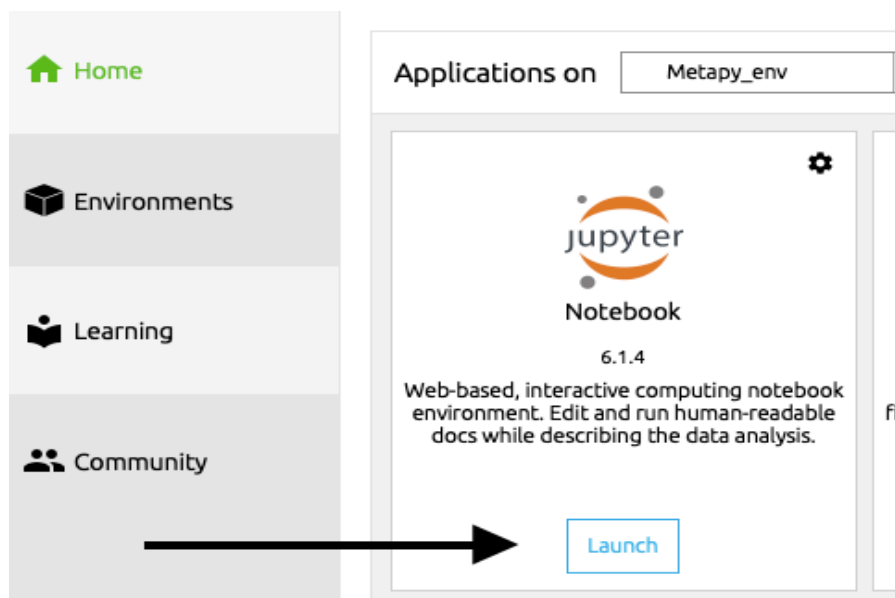
With all tools needed, we can complete the installation of Metapy in our environment:

4.1) Go back to anaconda and click on "Home"

4.2) On “Application on” select the environment that you just created. This will take a few seconds



4.3) Install and launch Jupyter notebook. If you haven't installed it yet, it will take a few seconds; otherwise, it will launch automatically.



4.3) Look for the directory where you saved the unzipped download resource folder mentioned in step 3 and click on Implementation.ipynb.



4.4) This contains the source code to install the libraries and packages for this tutorial. Read the comment of the source code and make sure you delete the comments before running each line. **NOTE*** if you get an error trying to run the code directly from the file, go back to the directory, create a new Python 3 and copy and paste the code into the newly created file. Just make sure this new file is in the same directory as the package-list.txt.

This will install Metapy and some of their useful toolkit in the environment. After the installation is completed, you can import the libraries in any other user interface that you prefer in anaconda as long as you use the environment where you installed the packages and libraries initially. For example, you could import these libraries on JupyterLab, Qt Console, Jupyter Notebook, etc.