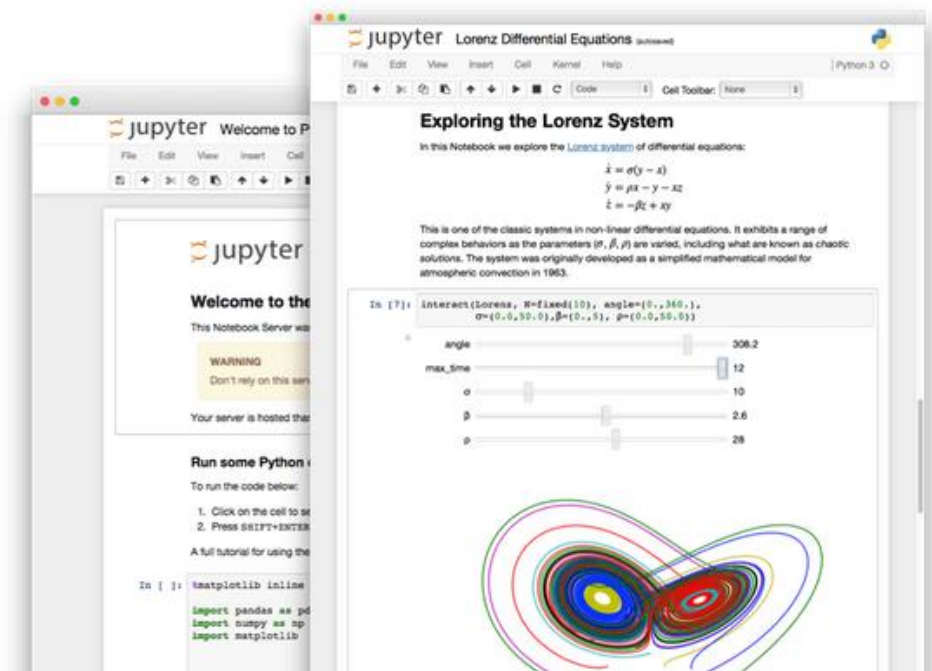


Tutorial

Matlab Kernel for Jupyter Notebooks



Source: <http://jupyter.org/>

Contact

Data Management

Address: GEOMAR Helmholtz Centre for Ocean Research Kiel
Wischhofstr. 1-3
24148 Kiel | Germany

Phone: 0431 / 600 2338

E-Mail: datamanagement@geomar.de

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1. Quickstart

Install as per instructions below:

- Launch anaconda prompt (Windows) or Terminal (linux/mac). In Terminal/ Prompt:
 - **activate conda environment** (Windows: `activate ml_jp` Linux/Mac: `source activate ml_jp`)
 - **start jupyter notebook** by typing `jupyter notebook`
- Internet Browser with Jupyter Notebook Home should open
 - If you are unfamiliar with Jupyter Notebooks, [read some guides](#)
 - Create a new notebook using Matlab Kernel and start writing scripts

2. Installation

2.1 Set up an anaconda installation

(Lending from: <https://medium.com/@rabernat/32d58c63aa95> and <https://walczak.org/2017/07/using-matlab-in-jupyter-notebooks-on-windows/>)

2.2 Install Miniconda3

On (64 bit) Unix:

Get the latest Miniconda3 installer from <https://conda.io/miniconda> and install it:

```
wget https://repo.continuum.io/miniconda/Miniconda3-latest-Linux-x86_64.sh -O
miniconda3.sh
bash miniconda3.sh -b -p $HOME/miniconda export
PATH="$HOME/miniconda/bin:$PATH"
```

On Windows download installer and run it.

2.3 Install the environment

Create a new python3.5 conda environment. The python version is important, since the python-matlab bridge (package pymatbridge) is only available for python 2.7, 2.4 and 3.5.

On windows, use the conda shell that came with your minconda/ anaconda installation. On linux/ mac just the terminal (e.g. iterm).

```
conda create -n ml_jp python=3.5
source activate ml_jp
```

The commands above create a new python 3.5 environment called ml_jp and then activates it.

Please make sure that the environment is activated for the following steps.

On linux mac:

```
source activate ml_jp
```

On windows:

```
activate ml_jp
```

Next, install the necessary libraries: jupyter for jupyter notebooks, metakernel a tool for jupyter/ipython kernels, pymatbridge to connect matlab and python and the matlab_kernel itself. It is advisable to use conda to install packages. For jupyter metakernel pymatbridge this is possible (we are using packages from the conda-forge channel in this case), but matlab_kernel is not maintained on conda and needs to be installed using pip.

```
conda install -c conda-forge jupyter metakernel pymatbridge
pip install matlab_kernel
```

If you start jupyter now, you should have the matlab kernel available as an option. However, trying to actually use the kernel will result in an error message:

ImportError: Matlab engine not installed: See <https://www.mathworks.com/help/matlab/matlab-engine-for-python.htm>

MATLAB's Python engine is not yet installed. The official documentation suggests the following:

On Windows systems —

```
cd "matlabroot\extern\engines\python"
python setup.py install
```

On Mac or Linux systems —

```
cd "matlabroot/extern/engines/python"
python setup.py install
```

Again, please make sure to perform this with your matlab conda environment activated. You should now be able to launch jupyter notebooks and start a new matlab notebook!

If you have other questions or comments please contact the data management team:

Phone: 0431 / 600 2338

E-Mail: datamanagement@geomar.de

Location: Eastshore / Building 1/ Entrance 2/ Room 110 - 112

Adress: GEOMAR Helmholtz Centre for Ocean Research Kiel
Wischhofstr. 1-3
24148 Kiel | Germany