

GettingStartedMDPR613

March 29, 2022

1 Setting Up JupyterHub for MDPR 613

1.1 Logging into JupyterHub on TALC

To load an interactive JupyterHub instance on talk, go to <http://talc.ucalgary.ca/> while either on a University of Calgary campus's WiFi connection, or while on the University of Calgary's FortiClient VPN. Instructions on how to set up the latter are available at https://rcs.ucalgary.ca/Connecting_to_RCS_HPC_Systems#Connecting_to_the_University_IT_General_VPN

1.2 Setting Up the Directory

Once logged in to the JupyterHub web page, create a folder named `MDPR_613` via the following:

1. Click **New** on the top right of the web page
2. Select **Folder**. This should result in a new directory called **Untitled Folder** appearing
3. Select the checkbox next to the folder
4. Click **Rename** at the top left of the web page, and name it `MDPR_613`

1.3 Loading the Workspace Environment

You should now be able to navigate inside the directory by double clicking on it. Do so, and upload the `environment.yml` using the **upload** button on the top right of the web page. Once it has been uploaded, do the following to load this notebook with our programming environment:

1. Open a terminal by clicking **New -> Terminal**
2. Type the following into the terminal, and hit enter: `conda env create -n MDPR_Course --file environment.txt`. This will create an environment with all the packages specified within `environment.txt`. *This can take several minutes to run; be patient, and accept the install request when prompted*
3. Once the prior process is done, activate this clean environment with `source activate MDPR_Course`. This should change the terminal so that `(MDPR_Course)` appears to the left of your username on the terminal
4. You can then enable Jupyter to use this environment with the `python -m ipykernel install --user --name=MDPR_Course` command

1.4 Running the Notebook with the Environment

Once the environment is set up and made accessible to Jupyter, we can then request that a notebook uses it by selecting it as our 'kernel'. To do so, do the following when you have a Jupyter Notebook open in your web browser:

1. Select **Kernel** from the menu along the top of the Notebook
2. From the resulting drop-down menu, select **Change Kernel -> MDPR_Course**

All future notebooks should load this kernel when loaded from now on, including this one. If everything was done correctly, the following code should produce the string **1.1.3** when run (rather than the 0.23.4 shown below). To run the code, select it and press **Shift + Enter**.

```
[1]: import pandas as pd
      pd.__version__
```

```
[1]: '0.23.4'
```