Docs » 3. Running the Jupyter Notebook

3. Running the Jupyter Notebook

3.1. Launching *Jupyter Notebook App*

The Jupyter Notebook App can be launched by clicking on the *Jupyter Notebook* icon installed by Anaconda in the start menu (Windows) or by typing in a terminal (*cmd* on Windows):

```
jupyter notebook
```

This will launch a new browser window (or a new tab) showing the Notebook Dashboard, a sort of control panel that allows (among other things) to select which notebook to open.

When started, the Jupyter Notebook App can access only files within its start-up folder (including any sub-folder). No configuration is necessary if you place your notebooks in your home folder or subfolders. Otherwise, you need to choose a Jupyter Notebook App start-up folder which will contain all the notebooks.

See below for platform-specific instructions on how to start Jupyter Notebook App in a specific folder.

3.1.1. Change Jupyter Notebook startup folder (Windows)

- Copy the *Jupyter Notebook* launcher from the menu to the desktop.
- Right click on the new launcher and change the *Target field*, change *%USERPROFILE%* to the full path of the folder which will contain all the notebooks.
- Double-click on the *Jupyter Notebook* desktop launcher (icon shows [IPy]) to start the Jupyter Notebook App. The notebook interface will appear in a new browser window or tab. A secondary terminal window (used only for error logging and for shut down) will be also opened.

3.1.2. Change Jupyter Notebook startup folder (Mac OS)

To launch Jupyter Notebook App:

- Click on spotlight, type `terminal` to open a terminal window.
- Enter the startup folder by typing `cd /some_folder_name`.
- Type `jupyter notebook` to launch the Jupyter Notebook App The notebook interface will appear in a new browser window or tab.

3.2. Shut down the *Jupyter Notebook App*

Closing the browser (or the tab) **will not close** the Jupyter Notebook App. To completely shut it down you need to **close the associated terminal**.

In more detail, the Jupyter Notebook App is a server that appears in your browser at a default address (*http://localhost:8888*). Closing the browser will not shut down the server. You can reopen the previous address and the Jupyter Notebook App will be redisplayed.

You can run many copies of the Jupyter Notebook App and they will show up at a similar address (only the number after ":", which is the port, will increment for each new copy). Since with a single Jupyter Notebook App you can already open many notebooks, we do not recommend running multiple copies of Jupyter Notebook App.

3.3. Close a notebook: *kernel* shut down

When a notebook is opened, its "computational engine" (called the kernel) is automatically started. Closing the notebook browser tab, will not shut down the kernel, instead the kernel will keep running until is explicitly shut down.

To shut down a kernel, go to the associated notebook and click on menu *File -> Close and Halt*. Alternatively, the Notebook Dashboard has a tab named *Running* that shows all the running notebooks (i.e. kernels) and allows shutting them down (by clicking on a *Shutdown* button).

3.4. Executing a notebook

Download the notebook you want to execute and put it in your notebook folder (or a sub-folder of it).

Then follow these steps:

- Launch the Jupyter Notebook App (see previous section).
- In the Notebook Dashboard navigate to find the notebook: clicking on its name will open it in a new browser tab.
- Click on the menu *Help -> User Interface Tour* for an overview of the Jupyter Notebook App user interface.
- You can run the notebook document step-by-step (one cell a time) by pressing *shift + enter*.
- You can run the whole notebook in a single step by clicking on the menu *Cell -> Run All*.
- To restart the kernel (i.e. the computational engine), click on the menu *Kernel -> Restart*. This can be useful to start over a computation from scratch (e.g. variables are deleted, open files are closed, etc…).

More information on editing a notebook:

- Notebook Basics (or alternate link)

🛈 Note

Save notebooks: modifications to the notebooks are automatically saved every few minutes. To avoid modifying the original notebook, make a copy of the notebook document (menu *File -> Make a copy …*) and save the modifications on the copy.

🛈 Warning

Pay attention to not open the **same** notebook document on **many tabs**: edits on different tabs can overwrite each other! To be safe, make sure you open each notebook document in only one tab. If you accidentally open a notebook twice in two different tabs, just close one of the tabs.

More info on the Jupyter Notebook App environment see References.