

About Jupyterlab

Outline



- Demo
 - Via url https://notebook.cc.in2p3.fr/hub/login
 - Demo related to UI
 - Demo related to kernels
- Information for daily use

Demo related to UI



- How to launch a notebooks server, then create and run a Python notebook
- View and actions on files
 - File browser (from left bar)
 - File menu (e.g. Log > Out : To stop your notebooks server; To switch between CPU and GPU notebooks server)
- Playing with git
 - Howto: copy/paste https://gitlab.in2p3.fr/ccin2p3-support/formations/workshops-gpu/2025.11/huma-num.git
- Terminal
 - From 'File > New > Terminal'
 - From Launcher, to go inside current working directory
- About Edition > cells
 - Type of cells (code, markdown)
 - Playing with cells (split, merge, move)
 - Docstrings (Shift Tab or Contextual Help) for Python notebook, '!' To run Linux command
- About Settings
 - Theme, Font size, etc
 - 'Settings > Settings Editor' (e.g. UI vs json, Autosave Interval, indentation, etc.)
- About Jupytext

Demo related to kernels



- List of kernels
 - View from Launcher
 - List of directories from \$HOME/.local/share/jupyter/kernels
- View and actions on kernels
 - Kernels & Terminals manager (from left bar)
 - Kernel menu
 - Kernel drop-down menu, for a running notebook, from top-right or from 'Kernel>Change Kernel...'
- Adding a new kernel to your workspace
 - As example from '/pbs/software/redhat-9-x86_64/jupyter_kernels/'
 - Howto: cp -pr /pbs/software/redhat-9-x86 64/jupyter kernels/RAG-LLM-P3.13 \$HOME/.local/share/jupyter/kernels

More details on kernels by Sébastien

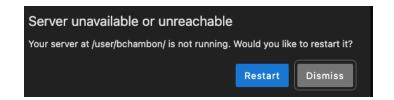
Some information for daily use



- Files or directories to know
 - \$HOME/.jupyter/
 - jupyter_notebook_config.py: can be generate via PATH='/opt/conda/bin' jupyter notebook --generate-config (to be run a from a Jupyterlab's terminal)
 - \$HOME/.local/share/jupyter/
 - kernels/
 - /var/log/notebookserver/notebookserver.log : Output (stdout + err) of the running container; To look into when having issues with a kernel
 - /tmp: Temporary area of a few GB

Paths possibly used by Jupyterlab via PATH='/opt/conda/bin' jupyter –paths (to be run a from a Jupyterlab's terminal)

- 'File > Log Out': To stop your notebooks server and go back to the login page
- Non relevant warning message, to dismiss most of the time



• The documentation to read first: <u>Jupyter Notebooks Platform</u>