Content

Jupyter

Infos

- Formerly IPython
- Open source, web (server) based application
- Mathematica-like, cell-based notebooks
- Can run different kernels (e.g. Python, R, Julia)
- Can be used with VC (requires parsing before commit)
- Notebooks can run in a browser (also locally), the nteract app and in Atom (with the **`Hydrogen`** package)

Jupyter

Installation

- Jupyter itself runs on Python
- Jupyter strongly recommends using the Anaconda distribution, but it also works with basic installations
- Basic installation via **`pip`**
- **`pip install jupyter`** (python 2)
- **`pip3 install jupyter`** (python 3)
- Running Jupyter: **`jupyter notebook`**

Jupyter

Kernels

- Installing kernels usually works by adding packages for the desired language
- For Julia:
  - `Pkg.add("IJulia")`
- For R:
  - `install.packages(c('repr', 'IRdisplay', 'evaluate', 'crayon', 'pbdZMQ', 'devtools', 'uuid', 'digest'))`
  - `devtools::install_github('IRkernel/IRkernel')`
  - `IRkernel::installspec(user = FALSE)` (system wide)
- For Ruby:
  - `gem install cztop iruby`
  - `iruby register -force`

Jupyter

Useful shortcuts

Enter	enter edit mode
Shift-Enter	run cell, select cell below
Ctrl-Enter	run cell
Alt-Enter	run cell, insert cell below
Y	to code
M	to markdown
R	to raw
L	toggle line numbers
O	toggle output
Shift-O	toggle output scrolling

Juno

Infos

- Extension for the Atom editor
- Open source
- MATLAB-like, file-based source code
- Can be used directly with VC

Juno

Installation

- Install Atom
- Install the **`uber-juno`** package for Atom

Juno

Useful shortcuts

`Ctrl+Shift+p`	Open the command panel
`Ctrl+Enter`	Evaluate at the cursor
`Ctrl+Shift+Enter`	Evaluate the current file
`Ctrl+j Ctrl+o`	Open the console
`Ctrl+j Ctrl+c`	Clear the console
`Ctrl+j Ctrl+s`	Start Julia
`Ctrl+j Ctrl+k`	Kill the Julia process
`Ctrl+j Ctrl+r`	Open a REPL
`Ctrl+j Ctrl+p`	Open the Plot Pane
`Ctrl+j Ctrl-d`	Get doc for symbol under the cursor
`Ctrl+j Ctrl-g`	Go to def of symbol under cursor

Other IDEs

- JuliaPro (actual IDEs are Juno, Eclipse and Jupyter)
- JuliaBox (browser based Jupyter)
- Sublime-Julia (dead?)
- emacs
- vim
- REPL
- JupyterLab (Jupyter "2.0")