

You need to install this software in order to use the jupyter notebooks that are part of this course.

Directions adapted from software tools for Software Carpentry workshops, please see license details below.

Setup

To participate in this course, you will need access to the software described below. In addition, you will need an up-to-date web browser.

We maintain a list of common issues that occur during installation as a reference for instructors that may be useful on the Configuration Problems and Solutions wiki page.

The Bash Shell

Bash is a commonly-used shell that gives you the power to do simple tasks more quickly.

Windows

Video Tutorial

- 1. Download the Git for Windows installer.
- 2. Run the installer and follow the steps bellow:
 - 1. Click on "Next".
 - 2. Click on "Next".

- 3. **Keep "Use Git from the Windows Command Prompt" selected and click on "Next".** If you forgot to do this programs that you need for the workshop will not work properly. If this happens rerun the installer and select the appropriate option. >>
- 4. Click on "Next".
- 5. Keep "Checkout Windows-style, commit Unix-style line endings" selected and click on "Next".
- 6. Keep "Use Windows' default console window" selected and click on "Next".
- 7. Click on "Install".
- 8. Click on "Finish".
- 3. If your "HOME" environment variable is not set (or you don't know what this is):
 - 1. Open command prompt (Open Start Menu then type cmd and press [Enter])
 - 2. Type the following line into the command prompt window exactly as shown:
 - setx HOME "%USERPROFILE%"
 - 3. Press [Enter], you should see SUCCESS: Specified value was saved.
 - 4. Quit command prompt by typing exit then pressing [Enter]

This will provide you with both Git and Bash in the Git Bash program.

Mac OS X

The default shell in all versions of Mac OS X is Bash, so no need to install anything. You access Bash from the Terminal (found in /Applications/Utilities). See the Git installation video tutorial for an example on how to open the Terminal. You may want to keep Terminal in your dock for this workshop.

Terminal

Linux

The default shell is usually Bash, but if your machine is set up differently you can run it by opening a terminal and typing bash. There is no need to install anything.

Python

Python is a popular language for research computing, and great for general-purpose programming as well. Installing all of its research packages individually can be a bit difficult, so we recommend Anaconda, an all-in-one installer.

Regardless of how you choose to install it, **please make sure** you install Python version 2.7 .

We will teach Python using the Jupyter notebook, a programming environment that runs in a web browser. For this to work you will need a reasonably up-to-date browser. The current versions of the Chrome, Safari and Firefox browsers are all supported (some older browsers, including Internet Explorer version 9 and below, are not).

Windows

Video Tutorial

- 1. Open http://continuum.io/downloads with your web browser.
- 2. Download the Python 2.7 installer for Windows. Windows
- 3. Install Python 2.7 using all of the defaults for installation *except* make sure to check **Make Anaconda the default Python** ("Register Anaconda as my default Python 2.7").

To run python (later in the course), you need to open an "Anaconda Prompt" (from Start Menu)

and type >python

To run Jupyter (later in the course), you need to open an "Anaconda Prompt" (from Start Menu) and type >jupyter notebook

Mac OS X

Video Tutorial

- 1. Open http://continuum.io/downloads with your web browser.
- 2. Download the Python 2.7 installer for OS X. Mac
- 3. Install Python 2.7 using all of the defaults for installation.

Linux

- 1. Open http://continuum.io/downloads with your web browser.
- 2. Download the Python 2.7 installer for Linux. (Installation requires using the shell. If you aren't comfortable doing the installation yourself stop here and request help at the workshop.) Linus
- 3. Open a terminal window.
- 4. Type

bash Anaconda2-

and then press tab. The name of the file you just downloaded should appear. If it does not, navigate to the folder where you downloaded the file, for example with:

cd Downloads

Then, try again.

- 5. Press enter. You will follow the text-only prompts. To move through the text, press the space key. Type yes and press enter to approve the license. Press enter to approve the default location for the files. Type yes and press enter to prepend Anaconda to your PATH (this makes the Anaconda distribution the default Python).
- 6. Close the terminal window.

Installation instructions licensed under Creative Commons Attribution license were adapted from Software Carpentry





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