[](http://datacarpentry.org/)

**Data Carpentry Workshop Setup Instructions**

**Requirements:** Data Carpentry's teaching is hands-on, so participants are encouraged to bring in and use their own laptops to insure the proper setup of tools for an efficient workflow once you leave the workshop. (We will provide instructions on setting up the required software several days in advance) *There are no pre-requisites, and we will assume no prior knowledge about the tools.*

**Contact**: Please email [admin@datacarpentry.org](mailto:admin@datacarpentry.org) for questions and information not covered here.

**Setup**

To participate in a Data Carpentry workshop, you will need working copies of the software described below. Please make sure to install everything and try opening it to make sure it works *before* the start of your workshop. If you run into any problems, please feel free to email the instructor or arrive early to your workshop on the first day. Participants should bring and use their own laptops to insure the proper setup of tools for an efficient workflow once you leave the workshop.

This workshop will be using the software outlined in the install instructions below. Please see the section for your operating system for those directions.

* [Windows](https://uw-madison-aci.github.io/2017-08-22-uwmadison-dc/install.html#windows)
* [Mac](https://uw-madison-aci.github.io/2017-08-22-uwmadison-dc/install.html#mac)
* [Linux](https://uw-madison-aci.github.io/2017-08-22-uwmadison-dc/install.html#linux)

**Windows**

Please go through all the installation steps below and make sure that you not only installed them, but start them up to make sure they're working. If you have any problems, don't hesitate to email the instructors to ask for help, or arrive early on the first day of the workshop to get help.

1. **A spreadsheet program**   
   For this workshop you will need a spreadsheet program. Many people already have Microsoft Excel installed, and if you do, you're set!   
   If you need a spreadsheet program, there are a few other options, like OpenOffice and LibreOffice. Install instructions for LibreOffice, which is free and open source, are here.
   * **Download the Installer**   
     Install LibreOffice by going to the [installation page](https://www.libreoffice.org/download/libreoffice-fresh/). The version for Windows should automatically be selected. Click on the button below "Main Installer" **Download Version x.y.z**. You will go to a page that asks about a donation, but you don't need to make one. Your download should begin automatically.
   * **Install LibreOffice**   
     Once the installer is downloaded, double click on it and it should install.
   * To use LibreOffice, double click on the icon and it will open.
2. **OpenRefine**   
   OpenRefine (previously Google Refine) is a tool for data cleaning that runs through a web browser, and any browser - Safari, Firefox, Chrome, Explorer - should work fine. You will need to download OpenRefine and install it, and when you open it, it will run through the browser, but you don't need an internet connection, and the data will all be stored on your computer.
   * Go to the OpenRefine [download page](http://openrefine.org/download.html)
   * Click on *Windows kit* to download the install file
   * To use it, unzip, and double-click on openrefine.exe (if you're having issues with openrefine.exe try refine.bat instead)
   * OpenRefine will then open in your web browser.
   * If it doesn't open automatically, open a web broswer after you've started the program and go to the URL http://localhost:3333 and you should see OpenRefine.
3. **R**   
   In the workshop, we will use RStudio. RStudio is a nice interface to the programming language R. To use RStudio, you need to install both R and RStudio.
   * Download R from [here](http://cran.r-project.org/bin/windows/base/release.htm)
   * Run the .exe file that was just downloaded
   * Go to the [RStudio Download page](http://www.rstudio.com/ide/download/desktop)
   * Under *Installers* select **RStudio 0.98.1103 - Windows XP/Vista/7/8**
   * Double click the file to install it
   * Once it's installed, open RStudio to make sure it works and you don't get any error messages.
4. **SQLite**   
   For this workshop we're going to use the Firefox SQLite Plugin. It works through the web browser Firefox.
   * If you don't already have Firefox installed [install Firefox](https://www.mozilla.org/en-US/firefox/new/)
   * Start Firefox
   * Go to the [plugin homepage](https://addons.mozilla.org/en-US/firefox/addon/sqlite-manager/).
   * Click the "Add Now" button.
   * Click "Install Now" on the dialog that appears after the download completes.
   * Restart Firefox when prompted.
   * Select "SQLite Manager" from the "Tools" menu and it will open within Firefox

**Mac**

Please go through all the installation steps below and make sure that you not only installed them, but start them up to make sure they're working. If you have any problems, don't hesitate to email the instructors to ask for help, or arrive early on the first day of the workshop to get help.

1. **A spreadsheet program**   
   For this workshop you will need a spreadsheet program. Many people already have Microsoft Excel installed, and if you do, you're set!   
   If you need a spreadsheet program, there are a few other options, like OpenOffice and LibreOffice. Install instructions for LibreOffice, which is free and open source, are here.
   * **Download the Installer**   
     Install LibreOffice by going to the [installation page](https://www.libreoffice.org/download/libreoffice-fresh/). The version for Mac should automatically be selected. Click on the button below "Main Installer" **Download Version x.y.z**. You will go to a page that asks about a donation, but you don't need to make one. Your download should begin automatically.
   * **Install LibreOffice**   
     Once the installer is downloaded, double click on it and it should install.
   * To use LibreOffice, double click on the icon and it will open.
2. **OpenRefine**   
   OpenRefine (previously Google Refine) is a tool for data cleaning that runs through a web browser, and any browser - Safari, Firefox, Chrome, Explorer - should work fine. You will need to download Google Refine and install it, and when you open it, it will run through the browser, but you don't need an internet connection, and the data will all be stored on your computer.
   * Go to the OpenRefine [download page](http://openrefine.org/download.html)
   * Click on *Mac kit* to download the install file
   * Open the downloaded .dmg file
   * Drag the icon in to the Applications folder
   * Double click on the icon and Google Refine will then open in your web browser.
   * If it doesn't open automatically, open a web broswer after you've started the program and go to the URL http://localhost:3333 and you should see OpenRefine.
3. **R**   
   In the workshop, we will use RStudio. RStudio is a nice interface to the programming language R. To use RStudio, you need to install both R and RStudio.
   * Go to [CRAN](http://cran.r-project.org/) and click on *Download R for (Mac) OS X*
   * Select the .pkg file for the version of OS X that you have and the file will download.
   * Double click on the file that was downloaded and R will install
   * Go to the [RStudio Download page](http://www.rstudio.com/ide/download/desktop)
   * Under *Installers* select **RStudio *x.yy.zzz* - Mac OS X 10.6+ (64-bit)** to download it.
   * Once it's downloaded, double click the file to install it
   * Once it's installed, open RStudio to make sure it works and you don't get any error messages.
4. **SQLite**   
   For this workshop we're going to use the Firefox SQLite Plugin. It works through the web browser Firefox.
   * If you don't already have Firefox installed [install Firefox](https://www.mozilla.org/en-US/firefox/new/)
   * Start Firefox
   * Go to the [plugin homepage](https://addons.mozilla.org/en-US/firefox/addon/sqlite-manager/).
   * Click the "Add Now" button.
   * Click "Install Now" on the dialog that appears after the download completes.
   * Restart Firefox when prompted.
   * Select "SQLite Manager" from the "Tools" menu and it will open within Firefox

**Linux**

Please go through all the installation steps below and make sure that you not only installed them, but start them up to make sure they're working. If you have any problems, don't hesitate to email the instructors to ask for help, or arrive early on the first day of the workshop to get help.

1. **A spreadsheet program**   
   For this workshop you will need a spreadsheet program. LibreOffice comes preinstalled with several Linux distributions. If you don't already have it, use your package manager to install it: (e.g., sudo apt-get install libreoffice for Ubuntu and other Debian-based distributions).
2. **OpenRefine**   
   OpenRefine (previously Google Refine) is a tool for data cleaning that runs through a web browser, and any browser - Safari, Firefox, Chrome, Explorer - should work fine. You will need to download Google Refine and install it, and when you open it, it will run through the browser, but you don't need an internet connection, and the data will all be stored on your computer.
   * Go to the OpenRefine [download page](http://openrefine.org/download.html)
   * Click on *Linux kit* to download the install file
   * Download and extract
   * Type ./refine in your terminal and Google Refine will then open in your web browser.
   * If it doesn't open automatically, open a web broswer after you've started the program and go to the URL http://localhost:3333 and you should see OpenRefine.
3. **R**   
   In the workshop, we will use RStudio. RStudio is a nice interface to the programming language R. To use RStudio, you need to install both R and RStudio.
   * Follow the instructions for your distribution from [CRAN](https://cloud.r-project.org/bin/linux/). For most distributions, you can use your package manager (e.g. for Debian/Ubuntu run sudo apt-get install r-base, and for Fedora run sudo yum install R) but make sure that you have at least R 3.2.2 (as pre-packaged versions might be out of date).
   * To install RStudio, go to the [RStudio Download page](http://www.rstudio.com/ide/download/desktop)
   * Under *Installers* select the version for your distribution.
   * Once it's downloaded, double click the file to install it (or sudo dpkg -i rstudio-x.yy.zzz-amd64.deb at the terminal).
   * Once it's installed, open RStudio to make sure it works and you don't get any error messages.
4. **SQLite**   
   For this workshop we're going to use the Firefox SQLite Plugin. It works through the web browser Firefox.
   * If you don't already have Firefox installed [install Firefox](https://www.mozilla.org/en-US/firefox/new/)
   * Start Firefox
   * Go to the [plugin homepage](https://addons.mozilla.org/en-US/firefox/addon/sqlite-manager/).
   * Click the "Add Now" button.
   * Click "Install Now" on the dialog that appears after the download completes.
   * Restart Firefox when prompted.
   * Select "SQLite Manager" from the "Tools" menu and it will open within Firefox

[**License**](https://uw-madison-aci.github.io/2017-08-22-uwmadison-dc/LICENSE.html) [**Blog**](http://datacarpentry.github.io/blog) [**GitHub**](http://github.com/datacarpentry) [**Twitter**](http://twitter.com/datacarpentry) [**Issues**](http://github.com/uw-madison-aci/2017-08-22-uwmadison-dc/issues/)