Lab 1 Appendix

Book Title: *Real-Time Environmental Monitoring: Sensors and Systems, Second Edition – Lab Manual*

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Scripts using an external editor, Notepad++

When using Windows, a convenient text editor for typing scripts is **Notepad++**, (available from https://notepad-plus-plus.org/), which supports several languages, including line numbers and position within a line, powerful editing tools, and color codes for your script. Download, install, and run Notepad++. Go to the **Language** menu and select R from the list of programming languages. An additional tool to run R scripts from Notepad++ is the program **NpptoR** (https://sourceforge.net/projects/npptor/), which allows running lines of R code directly from Notepad++. by using key F8. This is equivalent to the right click and run in the RGui's R editor. For example, open **lab1.R** in Notepad++, note how the lines of codes are colored according to their role, and execute code by pressing F8. **NpptoR** will launch R if it is not already running at the location of the script used in Notepad++, thus you would have to **File|Change dir** when the script is not located at the working folder. Therefore, it is convenient to store a one-line script in your working directory, say **start.R** that you can execute to spawn an R session. The one line is simply **getwd()** when ran pressing F8 will open an R session, showing execution of **getwd()** confirming that you are indeed in the working directory.

Modify the shortcut to launch R from working folder

You can establish a working directory as default by including it in the **Start In** option of the R shortcut and avoid changing it every time. To do this, right click on shortcut, go to Properties, then type the name of your launch or work directory in the Start in box and delete the **--cd-to-userdocs** command in the Target box if you want to have the working folder outside the Users directory. Double click the shortcut to run, note that now when you select **File|Change dir**, the working folder will be the one selected as Start in for the shortcut and therefore there is no need to set it. When working on machines that are shared by many individuals (e.g., a university computer lab), a more permanent solution is to create a new personalized Shortcut in your working directory. Find the Shortcut on the desktop; right click, select **Create Shortcut,** and browse to the desired location (folder **labs**). Then right click on this new shortcut and select properties, edit **Start in** as shown before. Thereafter run R by a double click on this new personalized shortcut.