At one of my clients I run RStudio under Citrix in order to have access to their data.

For the most part this works fine. However, every time I visit them I spend the first few minutes of my day installing packages because my environment does not seem to be persisted from one session to the next.

I finally had a gap and decided to fix the problem.

**Where are the packages being installed?**

Installed packages just spontaneously disappear… That’s weird. Where are they being installed?

# Install package under Citrix.

> install.packages("devtools")

Installing package into ‘C:/Users/andrewcol/Documents/R/win-library/3.5’

It looks like the packages are being installed into a folder on my C: drive. But if I look for that folder it’s not there.

How does this make sense?

A bit of investigation revealed that the folder is actually on the C: drive on the Citrix server (rather than my local machine).

I confirmed this by installing the same package using RStudio running on my local machine.

# Install package on local.

> install.packages("devtools")

Installing package into ‘C:/Users/AndrewCol/Documents/R/win-library/3.4’

Note the difference in the path (andrewcol versus AndrewCol) and R versions.

**Environment**

I know that files on my network H: drive will not disappear between sessions, so this seems like a natural place to install packages. I can make this happen by changing the R\_LIBS\_USER environment variable.

# Environment on Citrix.

> Sys.getenv("R\_LIBS\_USER")

[1] "C:/Users/andrewcol/Documents/R/win-library/3.5"

We’ll assign a new value by setting up a .Renviron file. Where should this file live? On my local C: drive, my network H: drive or the Citrix server C: drive?

# Environment on Citrix.

> Sys.getenv("R\_USER")

[1] "C:/Users/andrewcol/Documents"

Okay, so it needs to go on the Citrix C: drive. This is really the crux of the entire process, because if you put it on H: or local C: then it will not be picked up by RStudio on Citrix.

**Writing to Citrix C:**

It turns out that it’s remarkably difficult to access C: on the Citrix server. I couldn’t get there using File Explorer. I couldn’t create a new file there using Notepad or RStudio.

No problem! Write an R script.

renviron <- file("C:/Users/andrewcol/Documents/.Renviron", "w")

cat(

"R\_LIBS\_USER='H:/myCitrixFiles/Documents/R/win-library/3.5'",

"R\_USER='H:/myCitrixFiles/Documents'",

file = renviron,

sep = "\n"

)

close(renviron)

That’ll create the .Renviron file in the right place and insert the required content.

Quick check that it’s been created.

setwd("C:/Users/andrewcol/Documents")

list.files(all.files = TRUE)

readLines(".Renviron")

Restart RStudio under Citrix. Packages will be installed to H: and should not mysteriously disappear between sessions.