Version control and Rstudio (Version 1.1)

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Figure 1: github logo:Octocat

Here I give a brief introduction about how to use version control in Rstudio.

1. Register a github account at https://github.com/. For example, my account is *johnsonzhj* and my email is johnsonzhj@gmail.com. You can skip this step if you already have an account available.

2. In **Rstudio**, click Tools–>Global Options–>Git/SVN–>**Create RSA key**–>Create. Then in Options interface of Git/SVN, click **View public key**, copy the **whole** content accordingly (with Ctrl+C as a shortcut). Then in an internet browser(eg. Chrome), login in your github account. In **dropdown menu**, click settings–>SSH keys–>add SSH key and paste the key you copied previously to **key** dialogue box, add a name you prefer to title dialogue box click add key.

3. Download software **git** (not github) from https://git-scm.com/ and install it accordingly once available.

4. Back to Rstudio, In menu tools–>Global option–>Git/SVN: Git executable dialogue box, change the direcotry to C:\program and files\git\bin\git.exe. (this is for Windows only. In Mac, the default **/usr/bin/git** is already fine).

5. In github, you should set up a new repository under menu **repositories**. For example, a new repository called *rdata*. Now you'll get a new url like this: https://github.com/your_account_name/rdata.

6. In Rstudio, click Tool–>shell and type following script with your own email and user name.

```
git config --global user.email "your email address"
git config --global user.name "your user name"
git config --list
git push -u origin master
```

7. In Rstudio, click file–>new project–>version control–>git copy the new generated url in step 5 to "Repository url" together with a suffix .git and create a name for the folder and the local directory accordingly.

8. Now you should be able to see a **Git** tab at the middle top of the Rstudio interface. Try to Click "commit" in Git (you can add commit information) and then click Push Branch the file. Then it **succeed**!

9. I will demonstrate how to use the **commit**,**pull** and **push** in Rstudio during the course.

Please contact johnsonzhj@gmail.com if there is any comments from you, feedback are welcome, thanks.

- Reference:

1. http://rmarkdown.rstudio.com/

2. http://www.r-bloggers.com/rstudio-and-github/

3. http://www.molecularecologist.com/2013/11/using-github-with-r-and-rstudio/

4. https://github.com/STAT545-UBC/Discussion/issues/93