

# Version Control & Sharing Your Code with bcgovr

bcgov useR day

Sam Albers - Knowledge Management Branch, BC Ministry of Environment and Climate Change  
Strategy

2018/10/11

# Version Control and Sharing

Does this look familiar?

```
$ ls -l
analysis_script.R
analysis_script_FINAL.R
analysis_script_FINAL_last_FINAL.R
analysis_script_FINAL_ok I promise last one.R
analysis_script_FINAL_very_LAST_FINAL.R
analysis_script_v1.R
analysis_script_v1_b.R
"analysis_script_v2_Han's edits.R"
analysis_script_v2_with_one_change.R
analysis_script_v3_2018-01-31.R
analysis_script_v2.5.R
analysis_script_just_trying_something.R
analysis_script_modification_for_lando.R
analysis_script_leia_edits.R
analysis_script_leia_edits_plus_jabba.R
```

# Version Control and Sharing

Does this look familiar?

```
$ ls -l
analysis_script.R
analysis_script_FINAL.R
analysis_script_FINAL_last_FINAL.R
analysis_script_FINAL_ok I promise last one.R
analysis_script_FINAL_very_LAST_FINAL.R
analysis_script_v1.R
analysis_script_v1_b.R
"analysis_script_v2_Han's edits.R"
analysis_script_v2_with_one_change.R
analysis_script_v3_2018-01-31.R
analysis_script_v2.5.R
analysis_script_just_trying_something.R
analysis_script_modification_for_lando.R
analysis_script_leia_edits.R
analysis_script_leia_edits_plus_jabba.R
```

Idea of sharing code?



Who has used git?

A blurred background image of a person with brown hair wearing a blue t-shirt, with their hands raised in the air. The image is out of focus, emphasizing the text overlay.

Who has used git?

Who has pushed code to GitHub?

A blurred background image of a person with brown hair wearing a blue t-shirt, with their hands raised in the air. The person is out of focus, and the background is a soft, out-of-focus green and brown.

Who has used git?

Who has pushed code to GitHub?

Who has pushed code to bcgov GitHub?

An R package to automate set up and sharing of R projects in  
bcgov GitHub following bcgov guidelines





## bcgovr does not help with:

- Ensuring you have the appropriate **permission** to create repos on bcgov GitHub
- Creating a GitHub account with two factor authentication
- Setting up personal access tokens
- Accidentally committing sensitive material to GitHub
- Probably many other things...





## bcgovr helps with:

- Adding the **required** files to meet BC government requirements that govern our use of GitHub.
- Creating a repository on GitHub directly from within R
- Setting up a project or package in R
- Easily adding badges and license headers to the files you create



# Installation and loading

```
if(!requireNamespace("remotes")) {  
  install.packages("remotes")  
}  
remotes::install_github("bcgov/bcgovr")  
library(bcgovr)
```

## before\_bcgovr::Setting up a new project

- Create a new folder
- Make that a RStudio project

## bcgovr::Pushing your code to GitHub

- Get your requirements in place
- Get folder under version control
- Create a repo on GitHub

## git::Working under version control

- Customize the README file
- Add the presentation
- A bit of git

## Get your requirements in place

```
use_bcgov_req(rmarkdown = FALSE, licence = "cc-by")
```

## Get folder under version control

```
use_bcgov_git(rmarkdown = FALSE, licence = "cc-by")
```

## Create a repo on GitHub

```
use_bcgov_github(organisation = "bcgov", rmarkdown = FALSE, licence = "cc-by")
```

# Edit README

- Customize text for the repo
- Add BCDevExchange badge

```
git add README.md  
git commit -m "update readme"  
git push origin master
```

# Create a folder for this year

```
dir.create("2018")
```

## Add content

- Add this presentation R markdown file

```
git add 2018/bcgov_useR_Albers.Rmd  
git commit -m "add Albers presentation"
```

# A Git Problem



# A Git Problem

I forgot to add a license header to a file to my last commit

```
# make your change  
git add 2018/bcgov_useR_Albers.Rmd  
# stage the file again  
git commit --amend --no-edit  
# commit with the same message  
git push origin master  
# push to remote
```



# What have we done

- Create repository on BCGov github
- Populated it with required elements of a public facing repo
- Used git
- Shared some code

# What you can do

- Add your presentation to this repo via a pull request

# Resources

- [New Cdn Gov Repos](#)
- [Happy Git with R](#)
- [Getting Unstuck with Git](#)