WKTAF Agenda Tuesday 10 October

Tuesday 10 October

10:00-10:10 Welcome and introductions.

10:10-10:30 Introduction to GitHub.

Coffee (15 mins)

10:45-11:00 Introduction to the icesTAF R package structure.

11:00-12:00 Overview of a TAF analysis: what we are aiming for.

Lunch (1hr)

13:00-13:30 Interactive practical guidance - getting **local data** into TAF.

13:30-14:00 Interactive practical guidance - getting **online data** into TAF.

Coffee (15 mins)

14:15 -14:45 - Interactive practical guidance – getting **web service data** into TAF.

14:45 -15:45 - Interactive practical guidance – getting **software** into TAF.

Coffee (15 mins)

16:00 – 16:45 - Interactive practical guidance on running category 5 assessment and creating SAG output files for upload.

WKTAF 10 - 11 October 2023

Transparent Assessment Framework for Stock Assessment

Introduction to Git and GitHub

Cecilia Kvaavik

Colin Millar

ICES CIEM

Science for sustainable seas

Introduction to Git and GitHub

- Git
- Repositories and branches
- GitHub
- Git with R Studio
- ICES on GitHub

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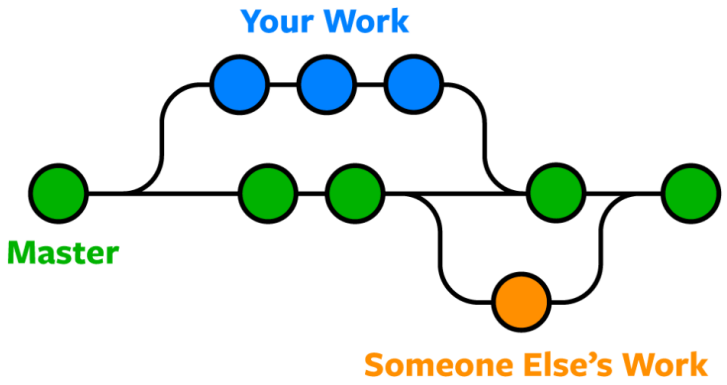
What is Git?

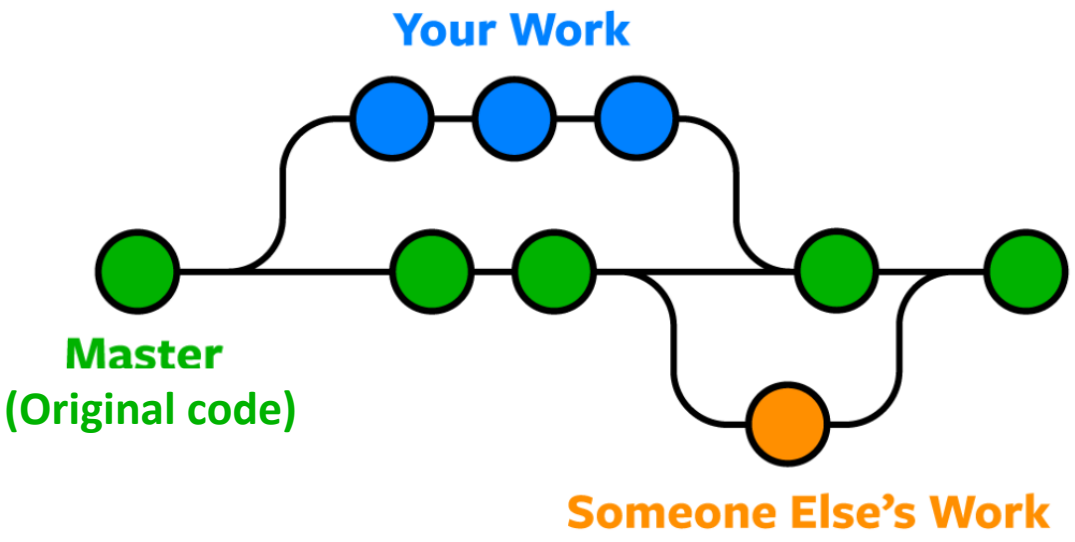
- Git is a widely used Version Control System, which lets you track changes you make to your files over time.

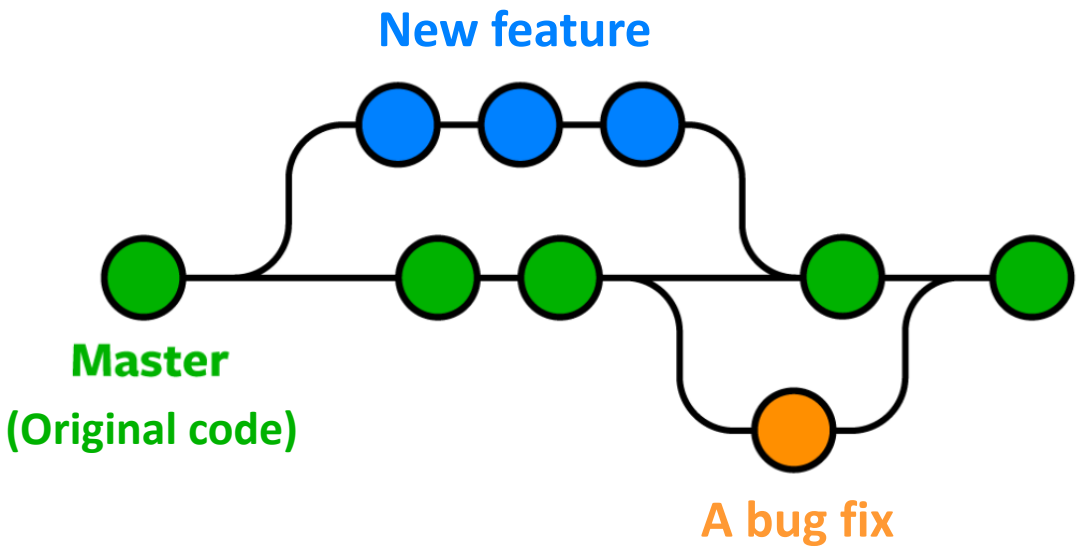
- Git is accessible via a command line (terminal), or a desktop app that has a GUI (graphical user interface)

- Gives a team the ability to work on the same code base (master branch) through a well-documented approach (development branches).



Branching your work



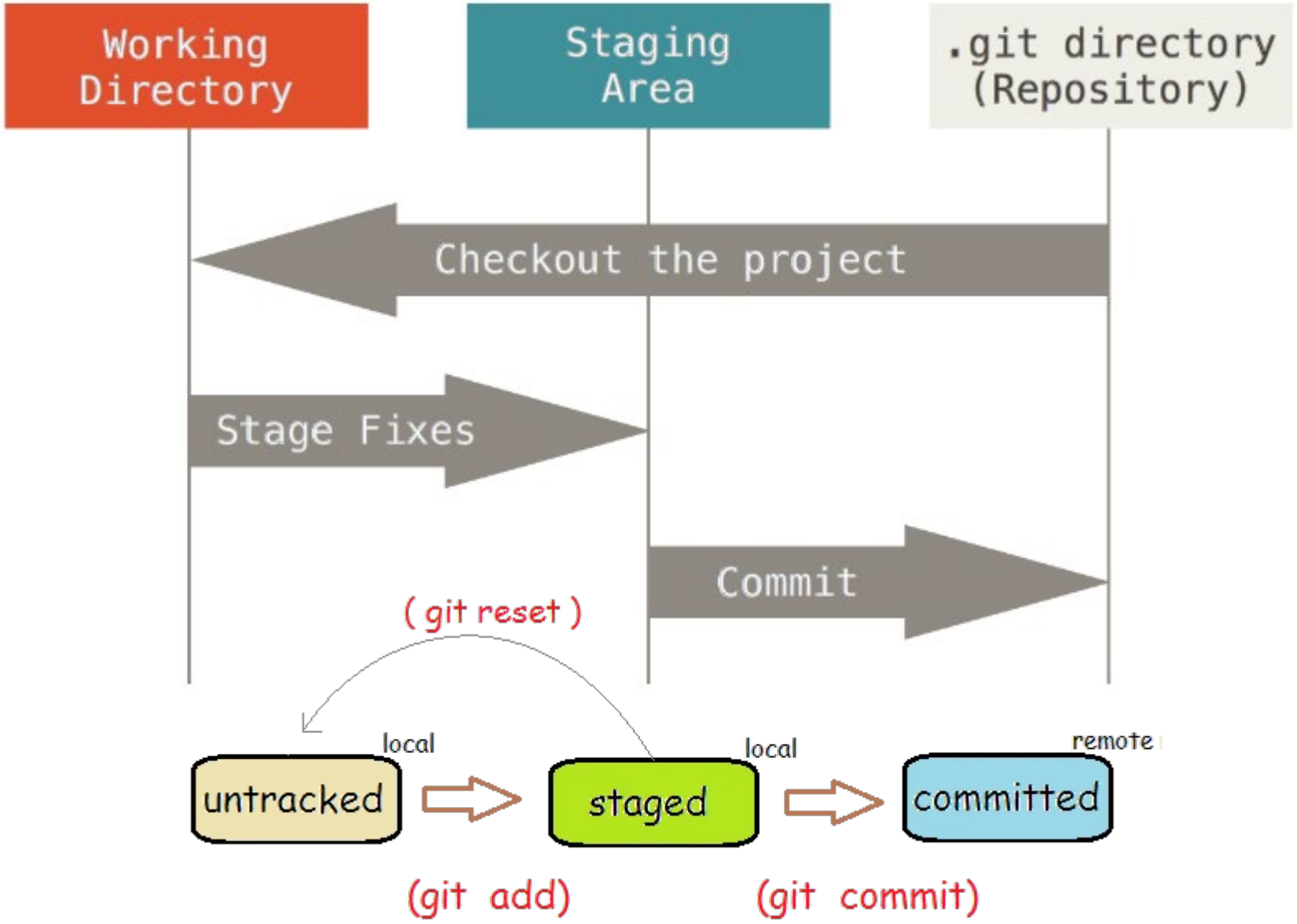


Repositories (Repo's)

- A repository is where your source code can be stored, contributed to, and managed over time.
- A repository stored locally or online (e.g., GitHub)
- A single repository is usually used for a single project

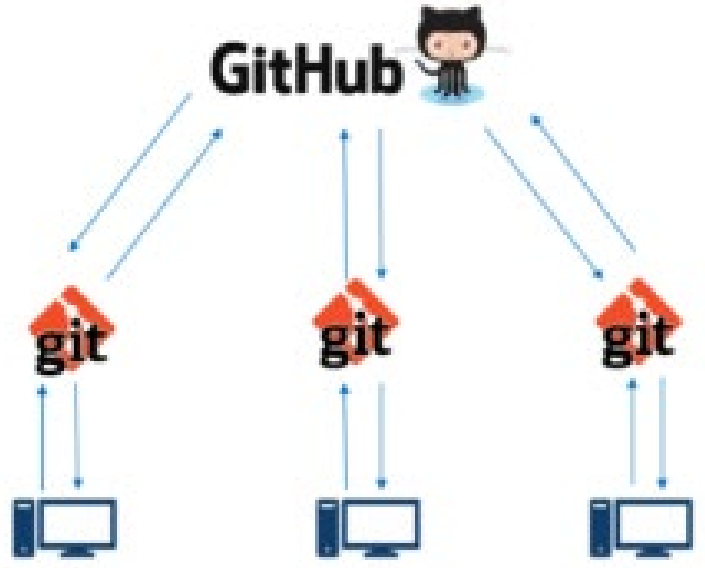
  (Repository = Project).

The Git workflow

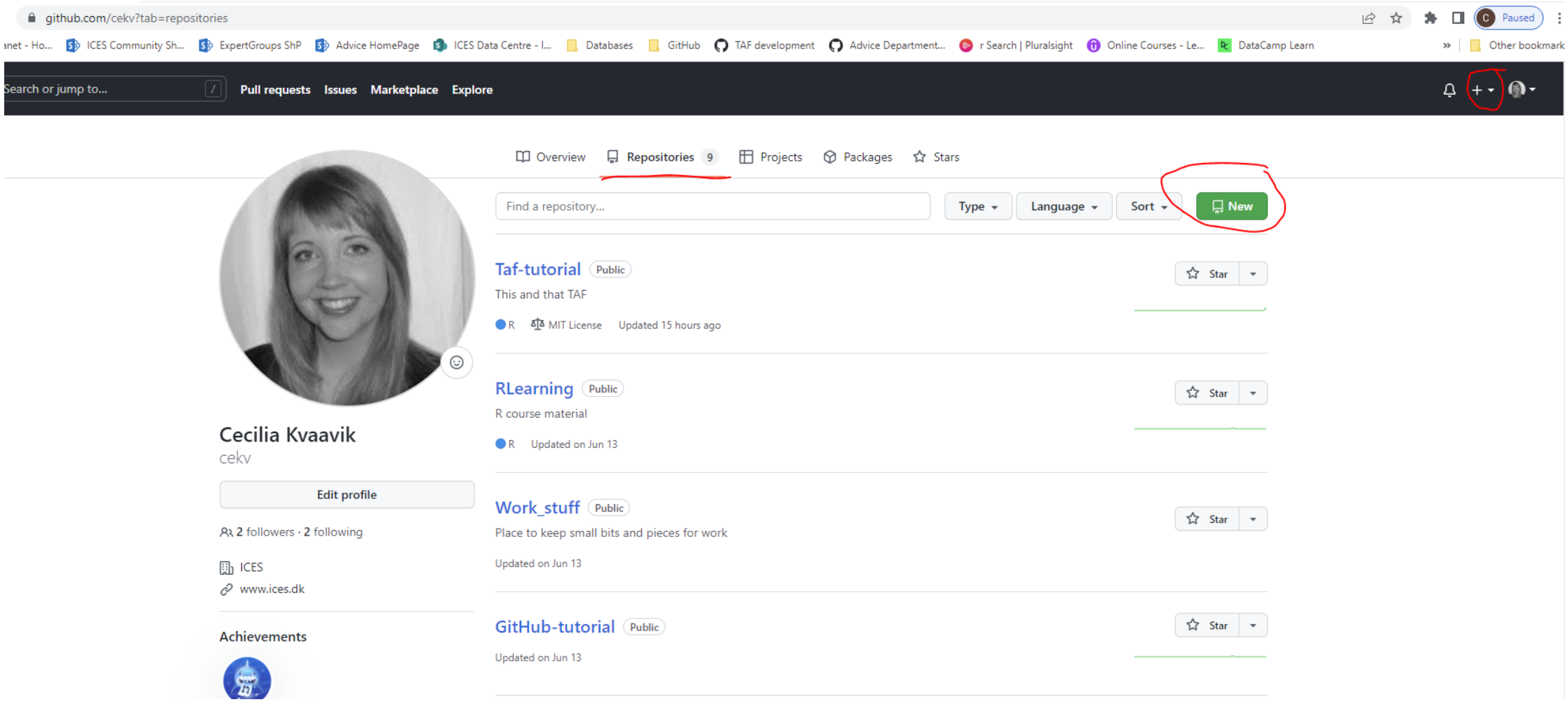


What is GitHub?

- GitHub is an online source code hosting service for Git repositories.
- GitHub is a file or code-sharing service
- Provides a visual interface to help track or manage your version-controlled projects locally through Git.
- It is a tool used by both local and distributed teams collaborating on projects.



Setup your own repo from GitHub



Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere?
Import a repository.

Repository template

Start your repository with a template repository's contents.

No template

Owner * Repository name *

cekv / GitHub-tutorial

Great repository names are short and memorable. Need inspiration? How about special-enigma?

Description (optional)

Public

Anyone on the internet can see this repository. You choose who can commit.

Private

You choose who can see and commit to this repository.

Initialize this repository with:

Skip this step if you're importing an existing repository.

Add a README file

This is where you can write a long description for your project. Learn more.

Add .gitignore

Choose which files not to track from a list of templates. Learn more.

.gitignore template: None

Choose a license

A license tells others what they can and can't do with your code. Learn more.

License: None

This will set `main` as the default branch. Change the default name in your settings.

You are creating a public repository in your personal account.

Create repository

cekv / GitHub-tutorial Public

Pin | Unwatch 1 | Fork 0 | Star 0

Code | Issues | Pull requests | Actions | Projects | Wiki | Security | Insights | Settings

main | 1 branch | 0 tags | Go to file | Add file | Code

cekv Initial commit 434c465 1 minute ago 1 commit

README.md	Initial commit	1 minute ago

README.md

GitHub-tutorial

About

No description, website, or topics provided.

Readme

0 stars

1 watching

0 forks

Releases

No releases published

Create a new release

Packages

No packages published

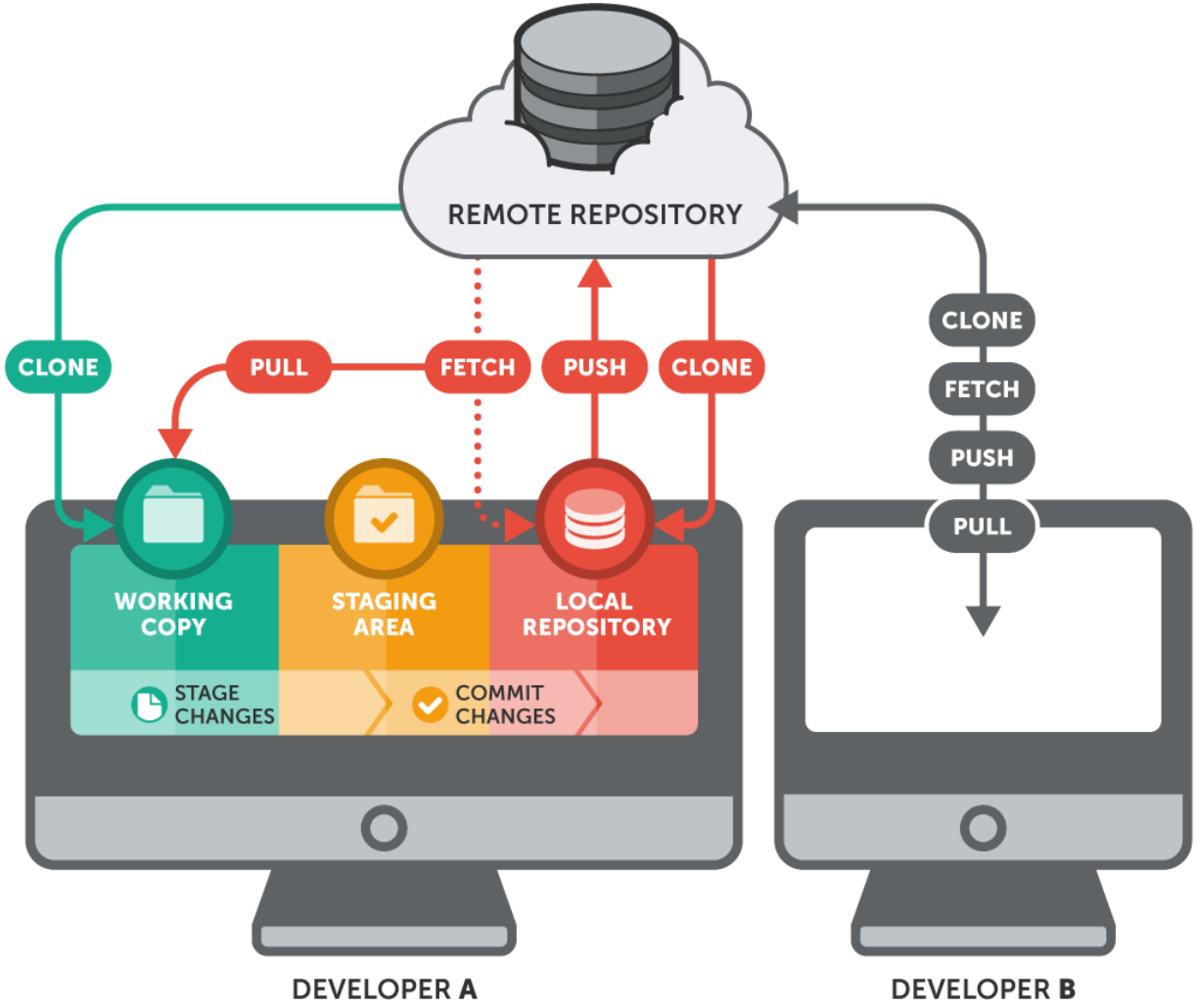
Publish your first package

Git with R studio

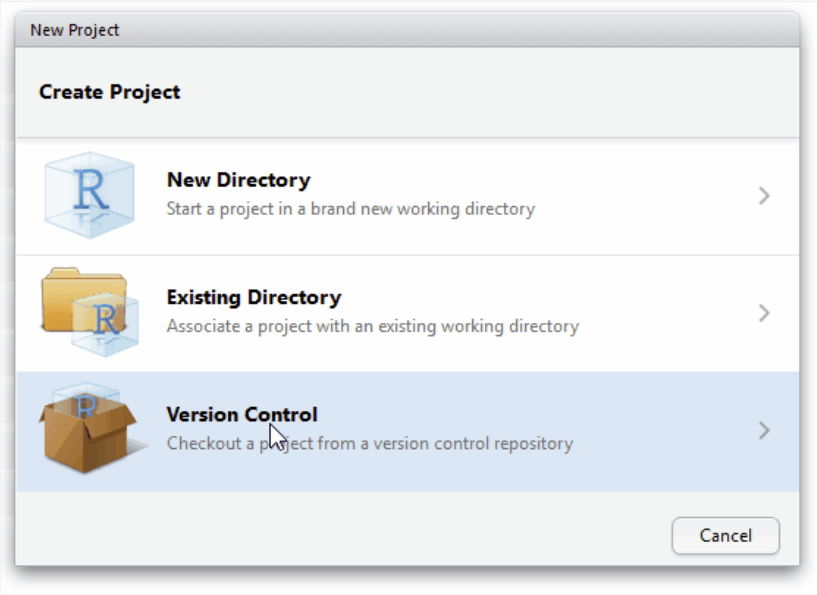
- A GitHub account.
- Git installed on your computer.
- RStudio configured to use git (https://support.rstudio.com/hc/en-us/articles/200532077-Version-Control-with-Git-and-SVN).
- Either clone an existing repo or create a Git repo from work you have already started in R.
- Using directories already under version control (local)
- Creating a new project based on a remote Git repository (e.g. From GitHub)

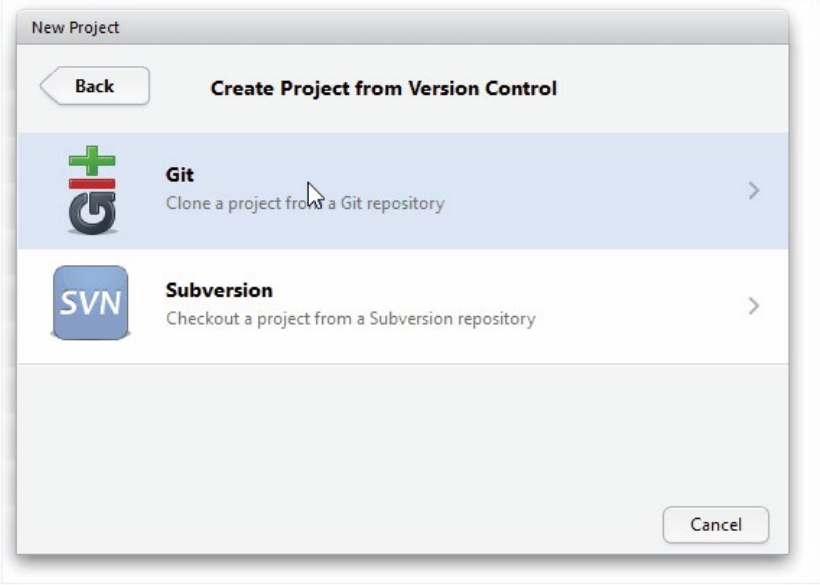
Git with R studio

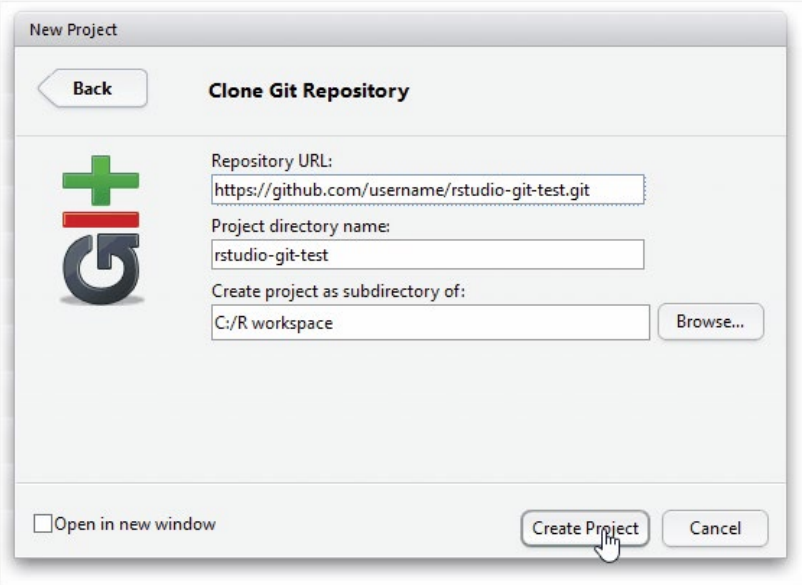
- Clone (download repo)
- Fetch (see changes)
- Pull (merging of your local and the remote repository)
- Push (upload changes)



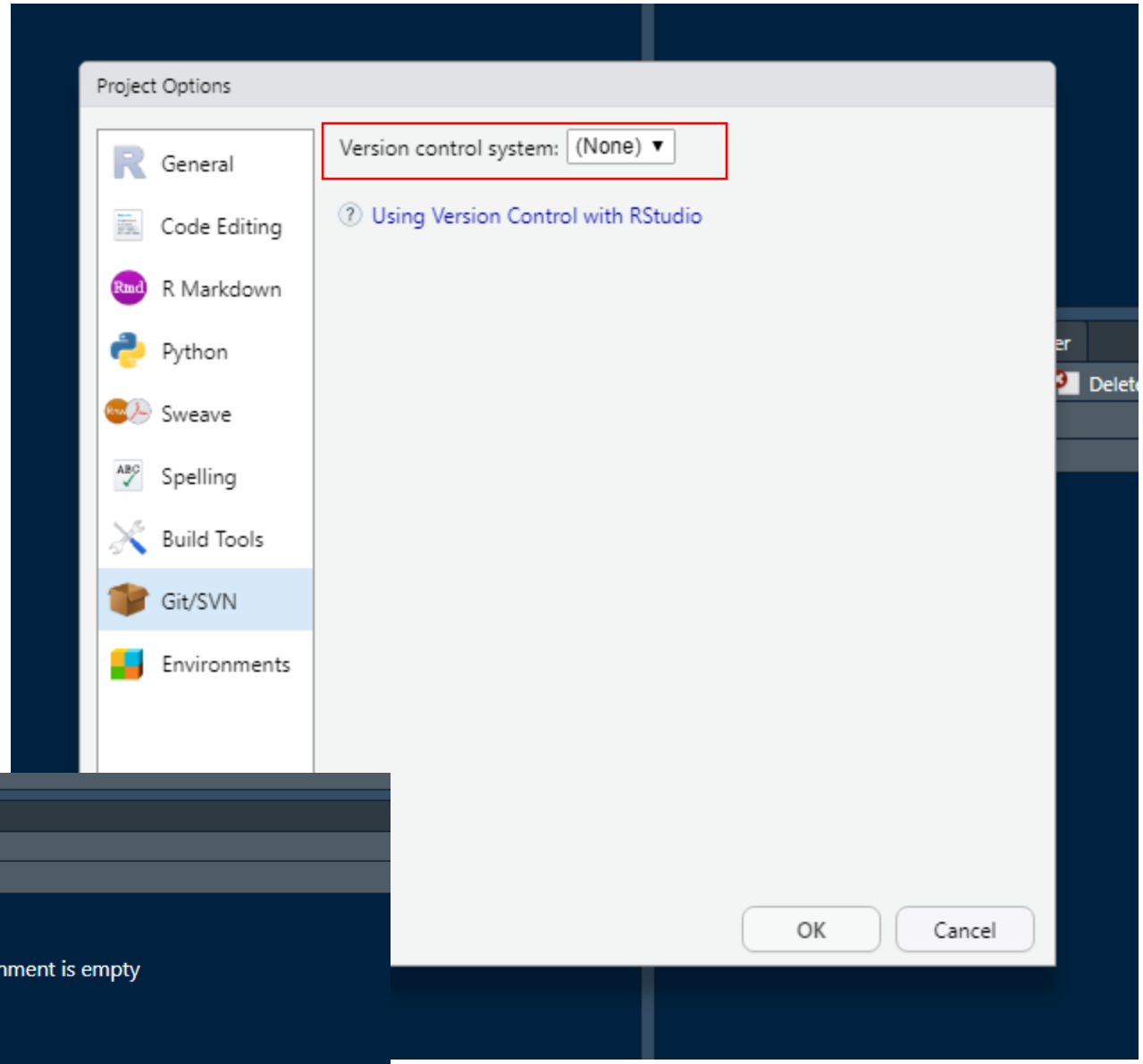
Clone a Git version control project in RStudio

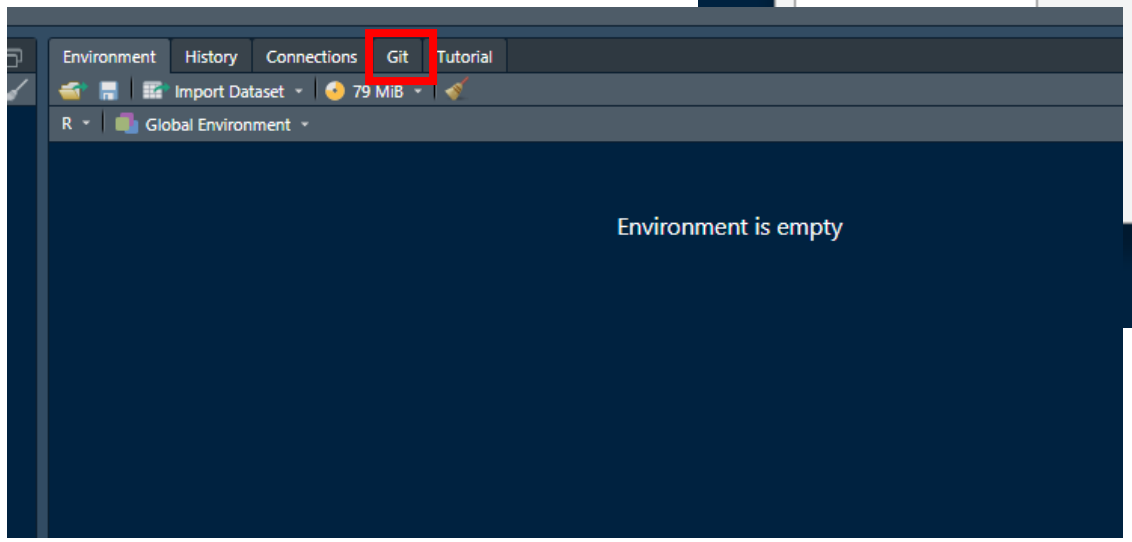






Tools > Version control > Git





Create a new repository

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Import a repository.

Repository template
Start your repository with a template repository's contents.

No template

Owner * **Repository name** *

cekv / Work stuff

Great repository nam Your new repository will be created as Work-stuff. ? How about laughing-broccoli?

Description (optional)

Small things i do for work side projects

Public
Anyone on the internet can see this repository. You choose who can commit.

Private
You choose who can see and commit to this repository.

Initialize this repository with:
Skip this step if you're importing an existing repository.

Add a README file
This is where you can write a long description for your project. Learn more.

Add .gitignore
Choose which files not to track from a list of templates. Learn more.

.gitignore template: None

Choose a license
A license tells others what they can and can't do with your code. Learn more.

License: GNU Affero General ...

This will set `main` as the default branch. Change the default name in your settings.

You are creating a public repository in your personal account.

Create repository

Quick setup — if you've done this kind of thing before

Set up in Desktop or HTTPS SSH git@github.com:cekv/Work-stuff.git

Get started by creating a new file or uploading an existing file. We recommend every repository include a README, LICENSE, and .gitignore.

...or create a new repository on the command line

```
echo "# Work-stuff" >> README.md
git init
git add README.md
git commit -m "first commit"
git branch -M main
git remote add origin git@github.com:cekv/Work-stuff.git
git push -u origin main
```

...or push an existing repository from the command line

```
git remote add origin git@github.com:cekv/Work-stuff.git
git branch -M main
git push -u origin main
```

...or import code from another repository

You can initialize this repository with code from a Subversion, Mercurial, or TFS project.

Import code

ProTip! Use the URL for this page when adding GitHub as a remote.

```
ceciliak@ICES371 MINGW64 /d/Cecilia/Documents/ceciliak/Work stuff (main)
$ git remote add origin https://github.com/cekv/Work_stuff.git

ceciliak@ICES371 MINGW64 /d/Cecilia/Documents/ceciliak/Work stuff (main)
$ git branch -M main

ceciliak@ICES371 MINGW64 /d/Cecilia/Documents/ceciliak/Work stuff (main)
$ git push -u origin main
Enumerating objects: 31, done.
Counting objects: 100% (31/31), done.
Delta compression using up to 8 threads
Compressing objects: 100% (29/29), done.
Writing objects:  64% (20/31), 91.66 MiB | 544.00 KiB/s
```

main 1 branch 0 tags Go to file Add file Code

cekv Initial commit for course materials 039dd19 1 minute ago 1 commit

Tidyverse R playbook	Initial commit for course materials	1 minute ago
Udemy courses	Initial commit for course materials	1 minute ago
creating-visualizations-base-r-graphics	Initial commit for course materials	1 minute ago
.gitignore	Initial commit for course materials	1 minute ago
All things R Data Science.R	Initial commit for course materials	1 minute ago
R training.Rproj	Initial commit for course materials	1 minute ago

Help people interested in this repository understand your project by adding a README. Add a README

Ab

R

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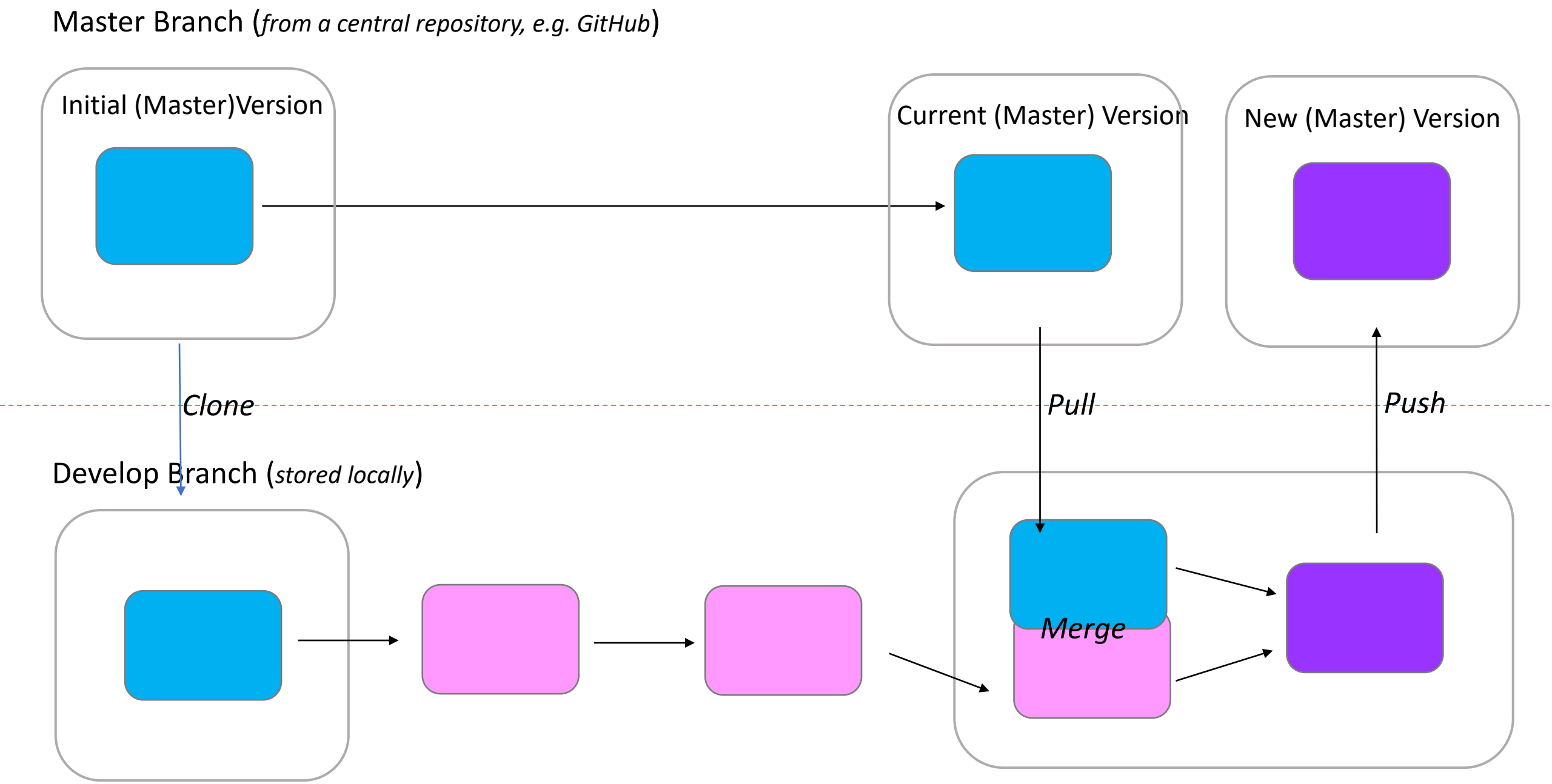

Master Branch (from a central repository, e.g. GitHub)
Initial (Master)Version
Current (Master) Version
New (Master) Version
Clone
Pull
Push
Develop Branch (stored locally)
Merge

Updating repo from RStudio

cekv / Taf-tutorial Public

Pin

Code | Issues | Pull requests | Actions | Projects | Wiki | Security | Insights | Settings

main | 1 branch | 0 tags | Go to file | Add file | Code

cekv Update worksheet script af98169 10 minutes ago 3 commits

Work stuff	Updating the worksheet script	14 minutes ago
bootstrap	Updating the worksheet script	14 minutes ago
.gitignore	Updating the worksheet script	14 minutes ago
DISCLAIMER_GIS.txt	Updating the worksheet script	14 minutes ago
HadSST.4.0.1.0_median.nc	Updating the worksheet script	14 minutes ago
LICENSE	Initial commit	39 minutes ago
README.md	Initial commit	39 minutes ago
Taf-tutorial.Rproj	Updating the worksheet script	14 minutes ago
Worksheet.R	Update worksheet script	10 minutes ago
cars.csv	Updating the worksheet script	14 minutes ago
data.R	Updating the worksheet script	14 minutes ago
model.R	Updating the worksheet script	14 minutes ago
output.R	Updating the worksheet script	14 minutes ago
report.R	Updating the worksheet script	14 minutes ago
trees.csv	Updating the worksheet script	14 minutes ago

About

This and that TAF

Readme

MIT license

0 stars

1 watching

0 forks

Releases

No releases published

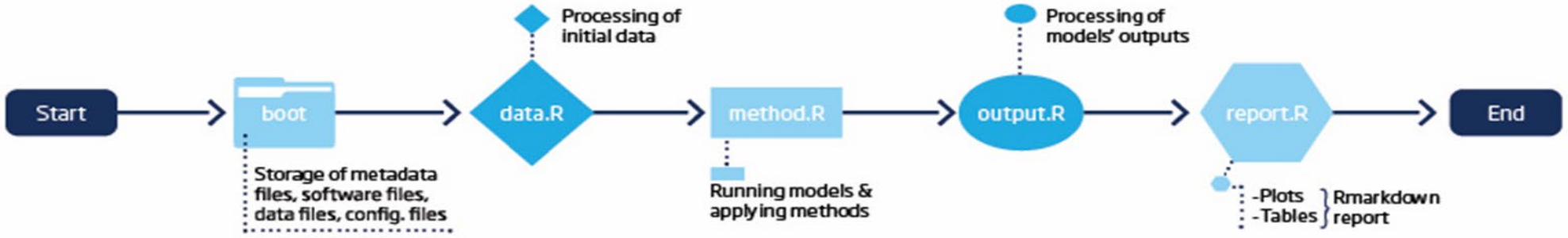
Create a new release

Packages

No packages published

Publish your first package

ICES on GitHub
– Transparent Assessment Framework



- ICES has 4 GitHub sites
  - TAF
  - Expert Groups / Workshops
  - ICES tools development
  - ICES tools production

Findable Accessible Interoperable Reusable

install.packages("icesTAF")

ices-tools-prod / icesTAF Public

Watch 8

Code | Issues 7 | Pull requests 1 | Actions | Projects | Security | Insights

master | 4 branches | 29 tags | Go to file | Add file | Code

colinpmillar cran submission 2508d02 5 days ago 674 commits

R	add install.deps argument to add.data.script	3 months ago
man	add install.deps argument to add.data.script	3 months ago
.Rbuildignore	cran submission	5 days ago
.gitignore	mundane changes	5 days ago
.travis.yml	Simplify .travis.yml	3 years ago
CRAN-SUBMISSION	cran submission	5 days ago
DESCRIPTION	cran submission	5 days ago
LICENSE	Create LICENSE	2 years ago
NAMESPACE	add function to install TAF analysis dependencies	3 months ago
NEWS.md	remove TAF functions	3 months ago
README.md	http -> https	3 years ago
cran-comments.md	cran submission	5 days ago

README.md

build passing | CRAN 4.0.0 | downloads 690/month | downloads 50K

About

Functions to support the ICES Transparent Assessment Framework

Readme

GPL-3.0 license

2 stars

8 watching

6 forks

Releases 27

CRAN release 3.5-0 Latest
on May 16, 2020

+ 26 releases

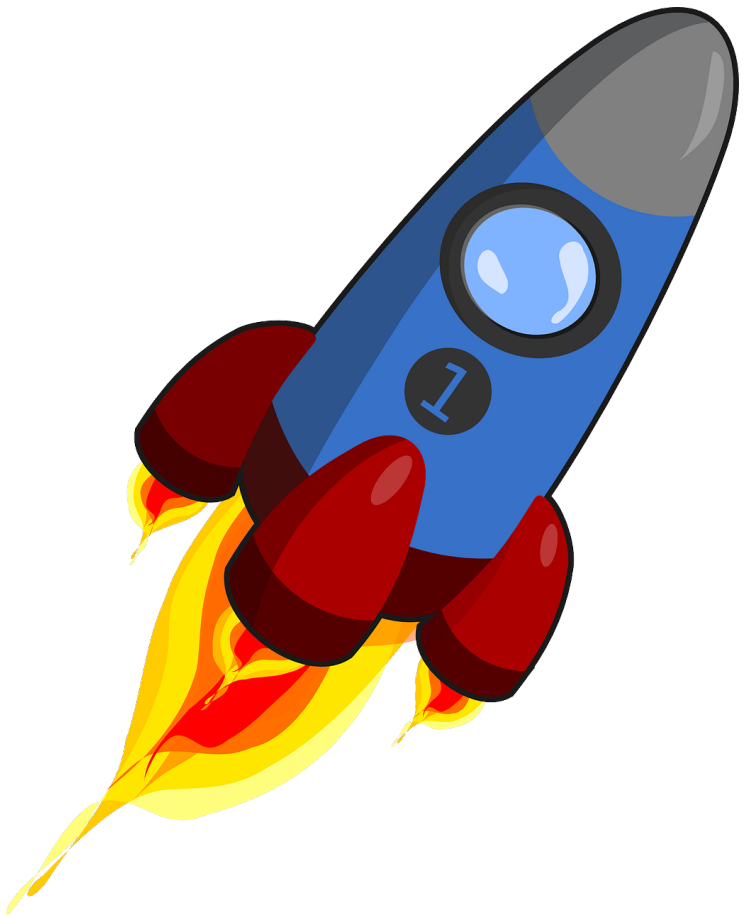
Packages

No packages published

Contributors 5

Get started!

- Signup for a GitHub account
  https://github.com/join
- Download Git
  https://git-scm.com/downloads
- Setup Git with GitHub
  https://docs.github.com/en/get-started/quickstart/set-up-git
- Create a repository
  https://docs.github.com/en/get-started/quickstart/create-a-repo
- Workshop repo
  https://github.com/ices-eg/wk_WKTAF_2023



Usefull links

ICES Github pages

https://github.com/ices-tools-prod

https://github.com/ices-tools-dev

https://github.com/ices-eg

https://github.com/ices-taf/doc/wiki

GitHub help page

https://docs.github.com/en

ICES TAF page

https://www.ices.dk/data/assessment-tools/Pages/transparent-assessment-framework.aspx

ICES R tools:

https://ices-tools-prod.r-universe.dev/builds

Other links for Git and GitHub

https://git-scm.com/book/en/v2

https://happygitwithr.com/index.html

WKTAF 10 - 11 October 2023

Transparent Assessment Framework for Stock Assessment

What is TAF and the structure of the icesTAF R package?

Cecilia Kvaavik

Colin Millar

Luca Lamoni

ICES CIEM

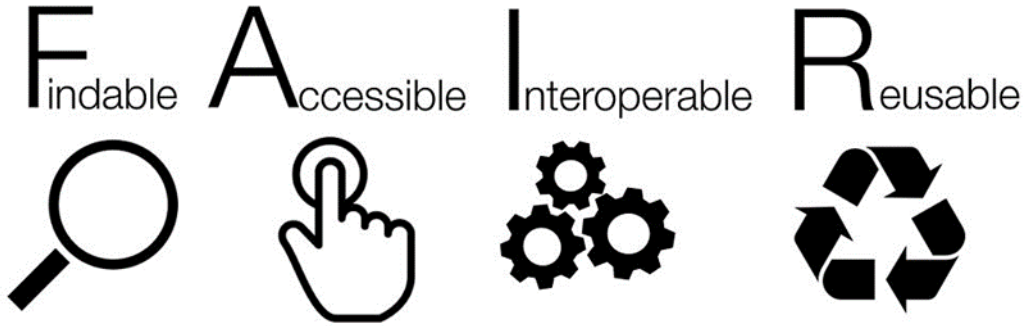
Science for sustainable seas

The Aim

Transparent Assessment Framework (TAF)

- A way to organise data and workflow
- Improve efficiency
- Ensuring transparency and quality of data and data analysis
- Create common ground with a common language -> R

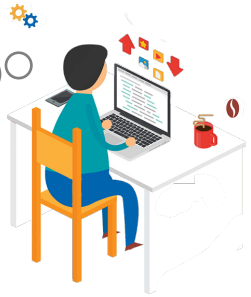
TAF adheres to the FAIR principles



Why is TAF important?

A

Code A



B

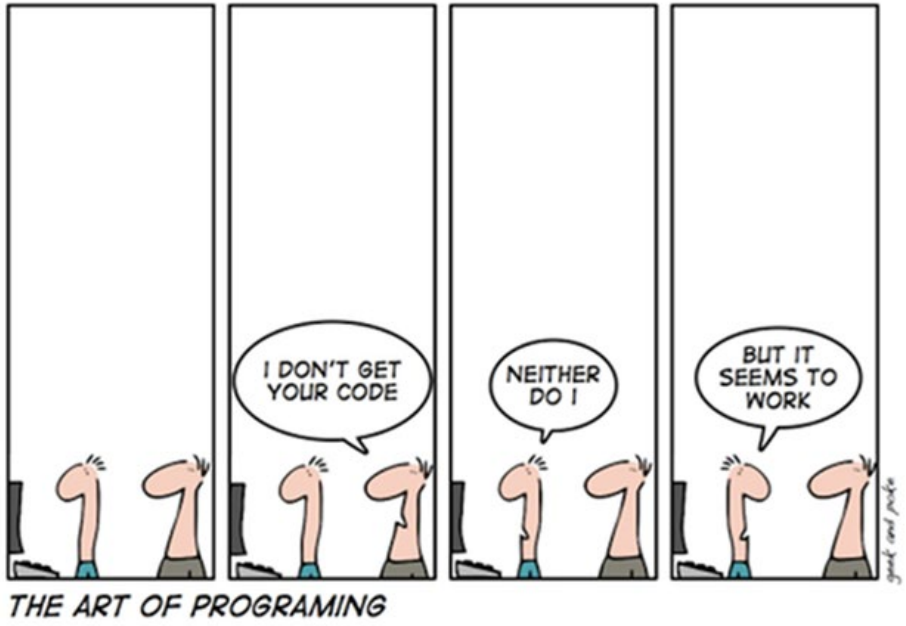
CODE B

C

Code C

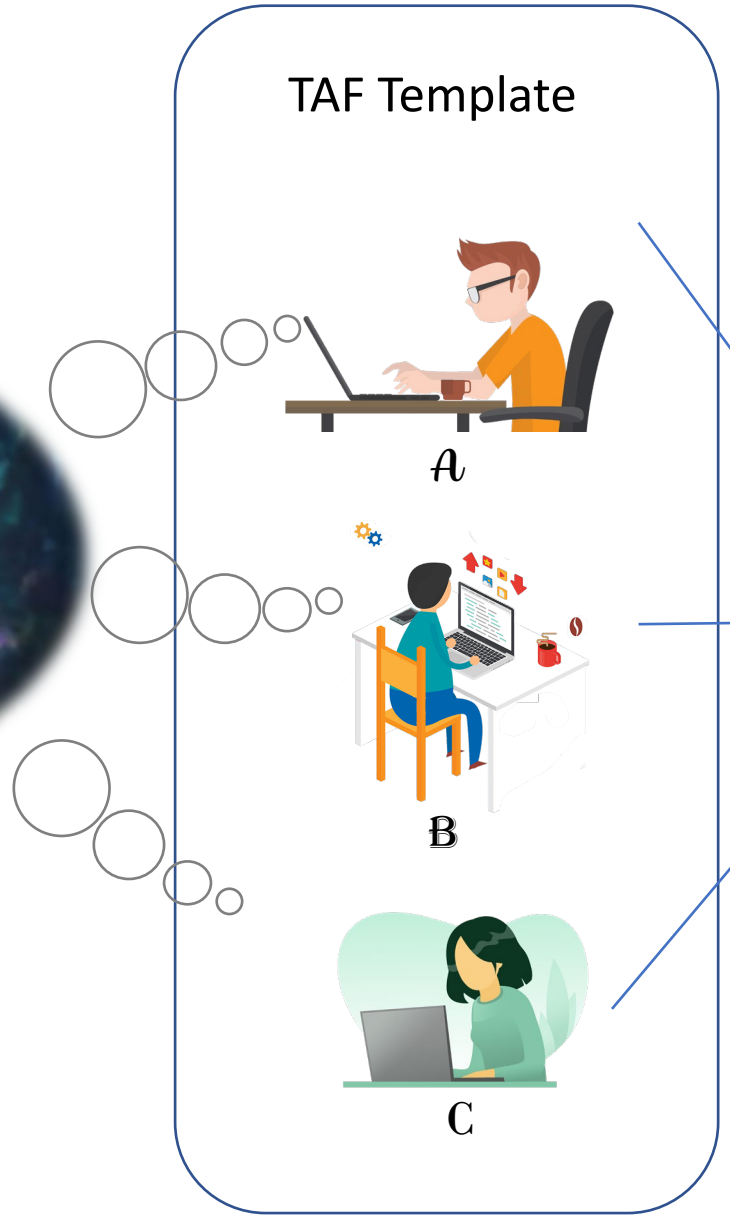
Why is TAF important for ICES assessment EGs?

- A way for experts to have a common workflow
- Everyone's work is structured in the same way
- Organised and well documented
- Easy to reproduce
- Less work – in the long run
- Strength in numbers
- It is NOT a tool, but an approach



The art of programming by Geek & Poke is licensed under CC BY 3.0

Why is TAF important?



TAF Code

CSS
HTML
PHP
</ />
D

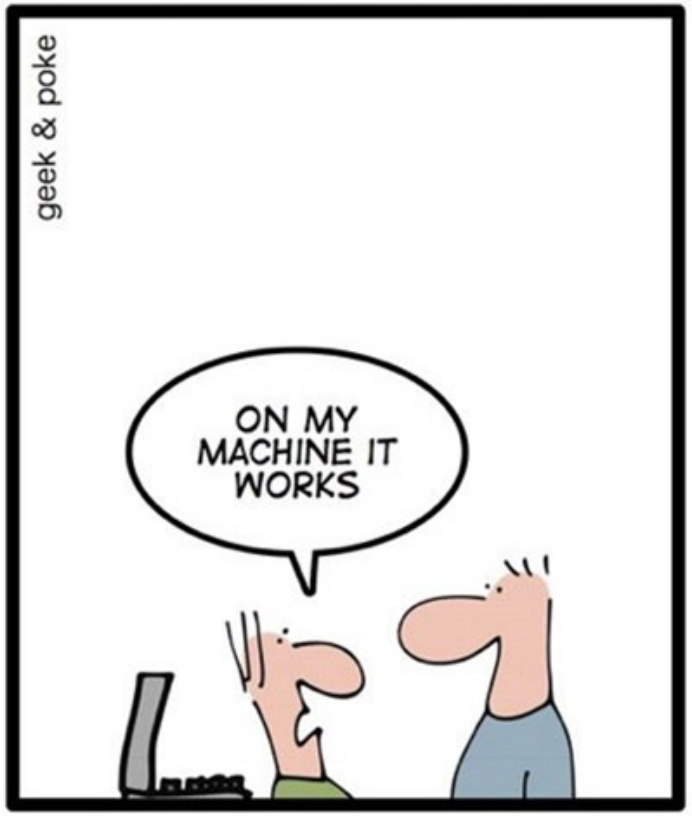
The Structure of TAF

TAF assessments are stored on the ICES GitHub site

- https://github.com/ices-taf

The method used to document the workflow is the R package icesTAF

- https://cran.r-project.org/web/packages/icesTAF/index.html



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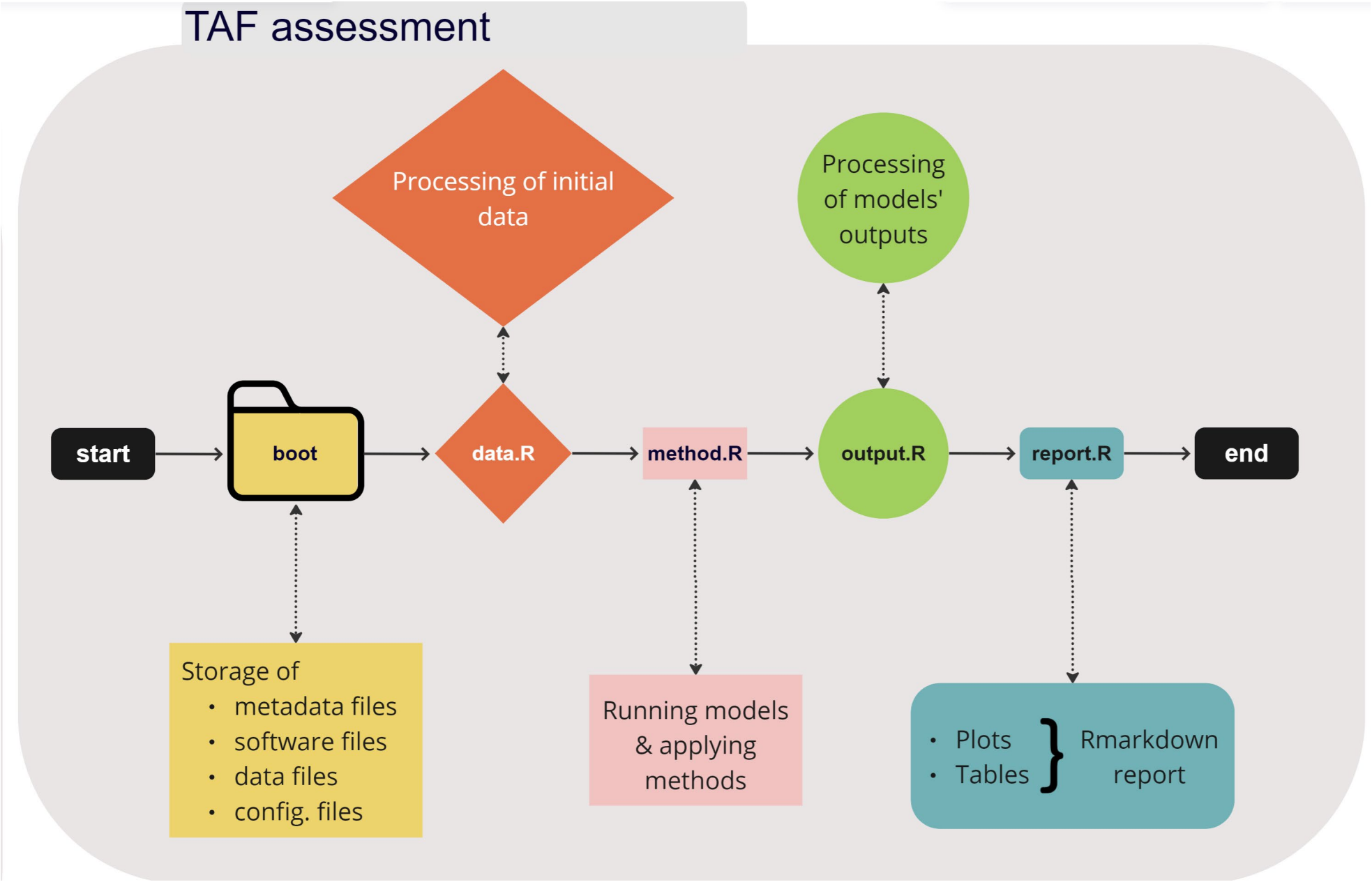
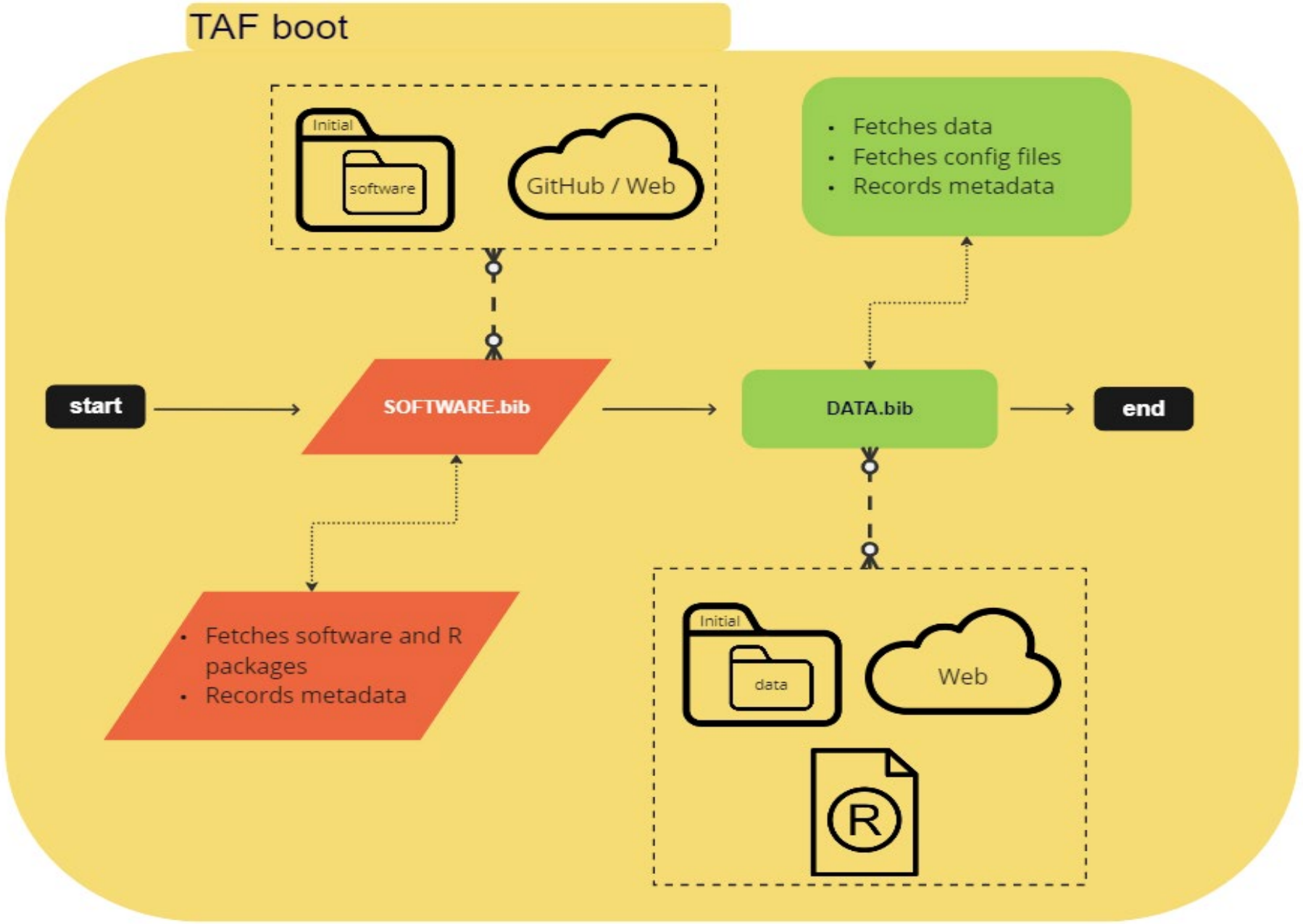
R is the common language

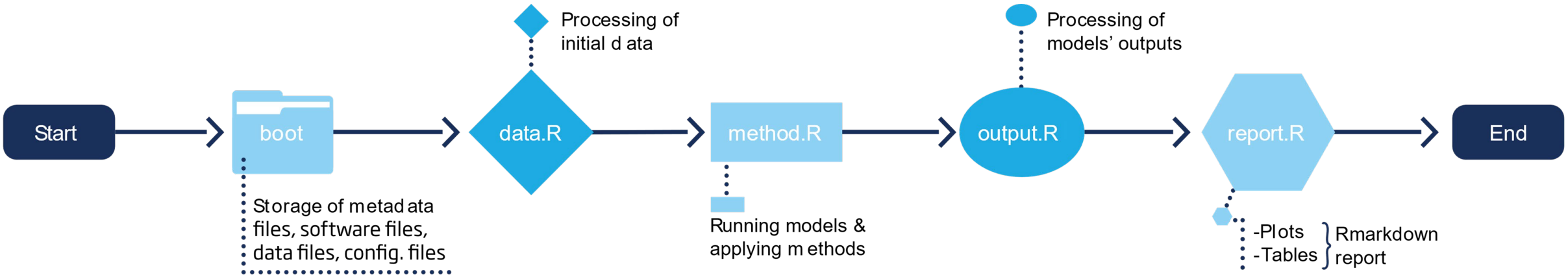
The Structure of TAF - taf.skeleton()



The Structure of TAF - taf.boot()



The Structure of TAF

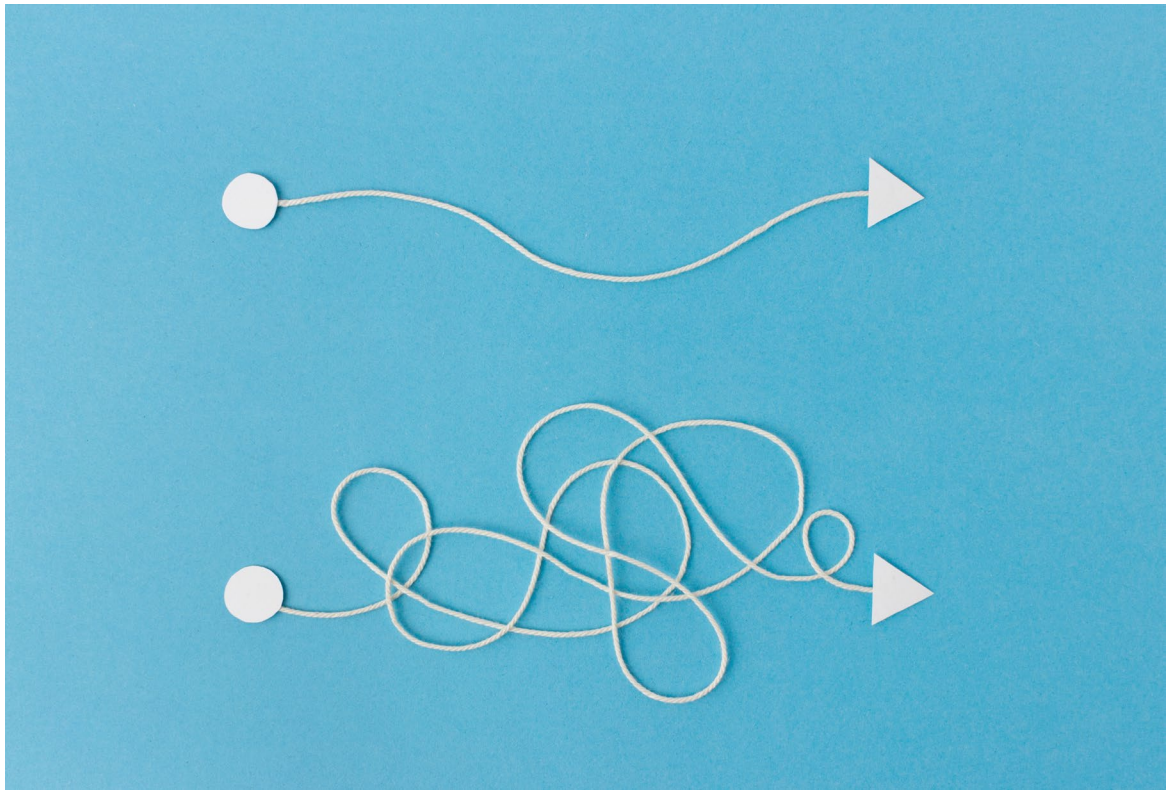


The structure of TAF

R - Packages

- TAF
  - Transparent Assessment Framework for reproducible research
  - TAF forms a base layer for the icesTAF.

- icesTAF
  - Functions to support the ICES Transparent Assessment Framework



Where to learn more about TAF?

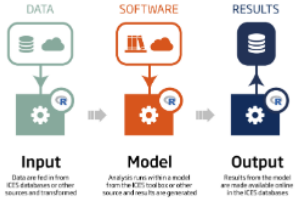
- Stock assessment graphs
- Stock Information Database (SID)
- **Transparent Assessment Framework**
- OSPAR CEMP Assessment
- AMAP Contaminants Assessment
- Ocean Climate (IROC)

Transparent Assessment Framework

Assuring quality, improving efficiency, and ensuring transparency of ICES advisory processes. Making the data, methods and results from ICES assessments easy to find, explore and re-run.

The Transparent Assessment Framework (TAF) is an online open resource for yearly ICES fish stock and mixed fisheries assessments, as well as other types of assessments stemming from ICES advice on topics such as contaminants, benthic indicators, fishing impacts, survey indices, catch estimates, ecosystem and fisheries overviews among others.

The open framework enables anyone to easily find, reference, download, and run the assessment from any stage in the process leading to the published ICES advice.



Print it Send to Share it

- MANAGE STOCK ASSESSMENT (LOGIN)
- GET STARTED WITH TAF
- LINK YOUR GITHUB ACCOUNT WITH ICES
- TAF WORKSHOP
- CONTACT US

MORE INFORMATION

- TAF learning materials
- 5 Steps to get an assessment into TAF
- TAF on Github
- TAF R package
- ICES R tools
- View TAF code: Icelandic Haddock
- View TAF code: North Sea Spotted Ray
- TAF Stock Statistics
- Sign up for a GitHub account

https://www.ices.dk/data/assessment-tools/Pages/transparent-assessment-framework.aspx

ICES Tools

- adviceXplorer
- Advice and Scenarios Database (ASD)
- Stock assessment graphs
- Stock Information Database (SID)
- Transparent Assessment Framework
- Ocean Climate (IROC)

Hosted by ICES

- OSPAR CEMP Assessment
- AMAP Contaminants Assessment

TAF Learning Materials

Here you can find information and links to TAF learning/teaching materials to get you started with using TAF.

Videos

Transparent Assessment Framework (TAF) Introduction

WKTAF May 2023

WKTAF September 2022 Day 1

WKTAF September 2022 Day 2

Webpages

TAF guidance and examples

TAF workshop

Signup for the latest TAF workshop

WKTAF 2023 on GitHub

WKTAF 2022 on GitHub

Print it Send to Share it

- ICES training courses
- WKTAF SharePoint
- ICES R tools

https://www.ices.dk/data/assessment-tools/Pages/taf-learning-material.aspx

Where to learn more about TAF?

Home

Colin Millar edited this page on Apr 17 · 25 revisions

Edit | New page

Welcome to the Transparent Assessment Framework wiki!

These pages are intented to provide useful guidance on using the various features of TAF. Please select a topic on the side to learn more about TAF.

Suggested pages to begin with:

- Getting set up
- Running a TAF analysis
- Creating TAF datasets
- Bib entries
- Example data records (bib entries)

Worked examples

- Example datasets 1
- Example datasets 2
- Example TAF scripts 1

Stock assessment templates

- Example Cat 3 TAF stockassessment
- Example Cat 5 TAF stockassessment
- Example TAF stockassessment

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Clone this wiki locally

https://github.com/ices-taf/doc.wi

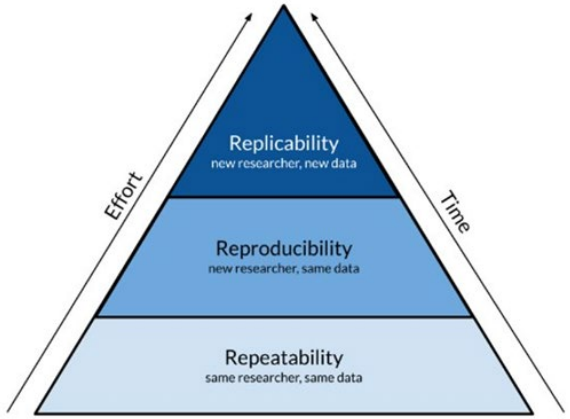
https://github.com/ices-taf/doc/wiki

Take home message on TAF

- Documents and version controls the data sources
- Documents and version controls R packages and software
- Encourages consistent code structure
- Creation of standard outputs dependent on type
- Creation of dynamic reports and documents

Assuring quality, improving efficiency, and ensuring transparency of ICES advisory processes.

Making the data, methods and results from assessments easy to find, explore and re-run.



Based off of a figure from Essawy et al, 2020 https://doi.org/10.1016/j.envsoft.2020.104753

WKTAF Agenda Tuesday 10 October

Tuesday 10 October

10:00-10:10 Welcome and introductions.

10:10-10:30 Introduction to GitHub.

Coffee (15 mins)

10:45-11:00 Introduction to the icesTAF R package structure.

11:00-12:00 Overview of a TAF analysis: what we are aiming for.

Lunch (1hr)

13:00-13:30 Interactive practical guidance - getting **local data** into TAF.

13:30-14:00 Interactive practical guidance - getting **online data** into TAF.

Coffee (15 mins)

14:15 -14:45 - Interactive practical guidance – getting **web service data** into TAF.

14:45 -15:45 - Interactive practical guidance – getting **software** into TAF.

Coffee (15 mins)

16:00 – 16:45 - Interactive practical guidance on running category 5 assessment and creating SAG output files for upload.