

Package ‘workflow’

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Description Provides a workflow for your analysis projects by combining literate programming ('knitr' and 'rmarkdown') and version control ('Git', via 'git2r') to generate a website containing time-stamped, versioned, and documented results.

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BugReports <https://github.com/jdblischak/workflow/issues>

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| | |
|----------------|---|
| extract_commit | <i>Extract a commit from a Git repository</i> |
|----------------|---|

Description

extract_commit extracts the 7-digit SHA1 identifier and message for a specified commit.

Usage

```
extract_commit(path, num)
```

Arguments

| | |
|------|--|
| path | character. Specify the path to a directory that is a Git repository (or any subdirectory of the Git repository). |
| num | numeric. The number of the commit to extract in reverse chronological order. In other words, 1 is the most recent commit, 2 is the second most recent commit, etc. |

Value

A list with the named elements `sha1` and `message` (both characters). If a Git repository is not found at `path`, both are `NA`.

Examples

```
## Not run:
# Most recent commit
extract_commit(".", 1)
# Penultimate commit
extract_commit(".", 2)

## End(Not run)
```

wflow_build

Build the site

Description

`wflow_build` builds the website from the files in the analysis directory. This is intended to be used when developing your code to preview the changes. When you are ready to commit the files, use [wflow_publish](#).

Usage

```
wflow_build(files = NULL, make = is.null(files), update = FALSE,
  republish = FALSE, view = interactive(), clean_fig_files = FALSE,
  delete_cache = FALSE, seed = 12345, log_dir = NULL,
  verbose = FALSE, local = FALSE, dry_run = FALSE, project = ".")
```

Arguments

| | |
|------------------------|--|
| <code>files</code> | character (default: <code>NULL</code>). Files to build. Only allows files in the analysis directory with the extension <code>Rmd</code> or <code>rmd</code> . If <code>files</code> is <code>NULL</code> , the default behavior is to build all outdated files (see argument <code>make</code> below). Supports file globbing . |
| <code>make</code> | logical (default: <code>is.null(files)</code>). When <code>make = TRUE</code> , build any files that have been modified more recently than their corresponding HTML files (inspired by Make). This is the default action if no files are specified. |
| <code>update</code> | logical (default: <code>FALSE</code>). Build any files that have been committed more recently than their corresponding HTML files (and do not have any unstaged or staged changes). This ensures that the commit version ID inserted into the HTML corresponds to the exact version of the source file that was used to produce it. |
| <code>republish</code> | logical (default: <code>FALSE</code>). Build all published R Markdown files (that do not have any unstaged or staged changes). Useful for site-wide changes like updating the theme, navigation bar, or any other setting in <code>_site.yml</code> . |

| | |
|-----------------|---|
| view | logical (default: interactive). View the website with wflow_view after building files. If only one file is built, it is opened. If more than one file is built, the main index page is opened. Not applicable if no files are built or if <code>dry_run = TRUE</code> . |
| clean_fig_files | logical (default: FALSE). Delete existing figure files for each R Markdown file prior to building it. This ensures that only relevant figure files are saved. As you develop an analysis, it is easy to generate lots of unused plots due to changes in the number of code chunks and their names. However, if you are caching chunks during code development, this could cause figures to disappear. Note that wflow_publish uses <code>clean_fig_files = TRUE</code> to ensure the results can be reproduced. |
| delete_cache | logical (default: FALSE). Delete the cache directory (if it exists) for each R Markdown file prior to building it. |
| seed | numeric (default: 12345). The seed to set before building each file. Passed to set.seed . DEPRECATED: The seed set here has no effect if you are using wflow_html as the output format defined in <code>_site.yml</code> . This argument is for backwards compatibility with previous versions of workflowr. |
| log_dir | character (default: NULL). The directory to save log files from building files. It will be created if necessary and ignored if <code>local = TRUE</code> . The default is to use a directory named <code>workflowr</code> in tempdir . |
| verbose | logical (default: FALSE). Display the build log directly in the R console as each file is built. This is useful for monitoring long-running code chunks. |
| local | logical (default: FALSE). Build files locally in the R console. This should only be used for debugging purposes. The default is to build each file in its own separate fresh R process to ensure each file is reproducible in isolation. |
| dry_run | logical (default: FALSE). List the files to be built, without building them. |
| project | character (default: ".") By default the function assumes the current working directory is within the project. If this is not true, you'll need to provide the path to the project directory. |

Details

`wflow_build` has multiple, non-mutually exclusive options for deciding which files to build. In other words, if multiple options are set to `TRUE`, the union of all files will be built. The argument `make` is the most useful for interactively performing your analysis. The other options are more useful when you are ready to publish specific files with [wflow_publish](#) (which passes these arguments to `wflow_build`).

- Files specified via the argument `files` are always built.
- If `make = TRUE`, all files which have been modified more recently than their corresponding HTML files will be built.
- If `update = TRUE`, all previously published files which have been committed more recently than their corresponding HTML files will be built. However, files which currently have staged or unstaged changes will be ignored.
- If `republish = TRUE`, all published files will be rebuilt. However, files which currently have staged or unstaged changes will be ignored.

Under the hood, `wflow_build` is a wrapper for [render_site](#) from the package `rmarkdown`.

Value

An object of class `wflow_build`, which is a list with the following elements:

- **files**: The input argument files
- **make**: The input argument make
- **update**: The input argument update
- **republish**: The input argument republish
- **view**: The input argument view
- **clean_fig_files**: The input argument `clean_fig_files`
- **delete_cache**: The input argument `delete_cache`
- **seed**: The input argument seed
- **log_dir**: The directory where the log files were saved
- **verbose**: The input argument verbose
- **local**: The input argument local
- **dry_run**: The input argument `dry_run`
- **built**: The relative paths to the built R Markdown files
- **html**: The relative paths to the corresponding HTML files

See Also

[wflow_publish](#)

Examples

```
## Not run:  
  
# Build any files which have modified  
wflow_build() # equivalent to wflow_build(make = TRUE)  
# Build a single file  
wflow_build("file.Rmd")  
# Build multiple files  
wflow_build(c("file1.Rmd", "file2.Rmd"))  
# Build multiple files using a file glob  
wflow_build("file*.Rmd")  
# Build every published file  
wflow_build(republish = TRUE)  
# Build file.Rmd and any files which have been modified  
wflow_build("file.Rmd", make = TRUE)  
  
## End(Not run)
```

wflow_git_commit *Commit files*

Description

wflow_git_commit adds and commits files with Git. This is a convenience function to run Git commands from the R console instead of the shell. For most use cases, you should use [wflow_publish](#) instead, which calls wflow_git_commit and then subsequently also builds and commits the website files.

Usage

```
wflow_git_commit(files = NULL, message = NULL, all = FALSE,
  force = FALSE, dry_run = FALSE, project = ".")
```

Arguments

| | |
|---------|--|
| files | character (default: NULL). Files to be added and committed with Git. Supports file globbing . |
| message | character (default: NULL). A commit message. |
| all | logical (default: FALSE). Automatically stage files that have been modified and deleted. Equivalent to: <code>git commit -a</code> |
| force | logical (default: FALSE). Allow adding otherwise ignored files. Equivalent to: <code>git add -f</code> |
| dry_run | logical (default: FALSE). Preview the proposed action but do not actually add or commit any files. |
| project | character (default: ".") By default the function assumes the current working directory is within the project. If this is not true, you'll need to provide the path to the project directory. |

Details

Some potential use cases for wflow_git_commit:

- Commit drafts which you do not yet want to be included in the website
- Commit files which do not directly affect the website (e.g. when you are writing scripts for a data processing pipeline)
- Manually commit files in docs/ (proceed with caution!). This should only be done for content that is not automatically generated from the source files in the analysis directory, e.g. an image file you want to include in one of your pages.

Under the hood, wflow_git_commit is a wrapper for [add](#) and [commit](#) from the package [git2r](#).

Value

An object of class `wflow_git_commit`, which is a list with the following elements:

- **files**: The input argument files.
- **message**: The message describing the commit.
- **all**: The input argument all.
- **force**: The input argument force.
- **dry_run**: The input argument dry_run.
- **commit**: The object returned by `git2r::commit` (only included if `dry_run == FALSE`).
- **commit_files**: The relative path(s) to the file(s) included in the commit (only included if `dry_run == FALSE`).

See Also

[wflow_publish](#)

Examples

```
## Not run:  
  
# Commit a single file  
wflow_git_commit("analysis/file.Rmd", "Add new analysis")  
# Commit multiple files  
wflow_git_commit(c("code/process-data.sh", "output/small-data.txt"),  
                 "Process data set")  
# Add and commit all tracked files, similar to `git commit -a`  
wflow_git_commit(message = "Lots of changes", all = TRUE)  
  
## End(Not run)
```

wflow_git_config *Configure Git settings*

Description

`wflow_git_config` configures the global Git settings on the current machine. This is a convenience function to run Git commands from the R console instead of the Terminal. The same functionality can be achieved by running `git config` in the Terminal.

Usage

```
wflow_git_config(user.name = NULL, user.email = NULL, ...)
```

Arguments

| | |
|-------------------------|---|
| <code>user.name</code> | character (default: NULL). Git user name. Git assigns an author when committing (i.e. saving) changes. If you have never used Git before on your computer, make sure to set this. |
| <code>user.email</code> | character (default: NULL). Git user email. Git assigns an email when committing (i.e. saving) changes. If you have never used Git before on your computer, make sure to set this. |
| <code>...</code> | Arbitrary Git settings, e.g. <code>core.editor = "nano"</code> . |

Details

The main purpose of `wflow_git_config` is to set the `user.name` and `user.email` to use with Git commits. Note that these do not need to match the name and email you used to register your online account with a Git hosting service (e.g. GitHub or GitLab). However, it can also handle arbitrary Git settings (see examples below).

There are two main limitations of `wflow_git_config` for the sake of simplicity. First, `wflow_git_config` only affects the global Git settings that apply to all Git repositories on the local machine and is unable to configure settings for one specific Git repository. Second, `wflow_git_config` can only add or change the `user.name` and `user.email` settings, but not delete them. To perform either of these actions, please use `git config` in the Terminal.

Under the hood, `wflow_git_config` is a wrapper for `config` from the package `git2r`.

To learn more about how to configure Git, see the Software Carpentry lesson [Setting Up Git](#).

Value

An object of class `wflow_git_config`, which is a list with the following elements:

- **user.name**: The current global Git user.name
- **user.email**: The current global Git user.email
- **all_settings**: A list of all current global Git settings

Examples

```
## Not run:  
  
# View current Git settings  
wflow_git_config()  
# Set user.name and user.email  
wflow_git_config(user.name = "A Name", user.email = "email@domain")  
# Set core.editor (the text editor that Git opens to write commit messages)  
wflow_git_config(core.editor = "nano")  
  
## End(Not run)
```

| | |
|----------------|--|
| wflow_git_pull | <i>Pull files from remote repository</i> |
|----------------|--|

Description

wflow_git_pull pulls the remote files from your remote repository online (e.g. GitHub or GitLab) into your repository on your local machine. This is a convenience function to run Git commands from the R console instead of the Terminal. The same functionality can be achieved by running `git pull` in the Terminal.

Usage

```
wflow_git_pull(remote = NULL, branch = NULL, username = NULL,  
              password = NULL, dry_run = FALSE, project = ".")
```

Arguments

| | |
|----------|--|
| remote | character (default: NULL). The name of the remote repository. See Details for the default behavior. |
| branch | character (default: NULL). The name of the branch in the remote repository to pull from. If NULL, the name of the current local branch is used. |
| username | character (default: NULL). Username for online Git hosting service (e.g. GitHub or GitLab). The user is prompted if necessary. |
| password | character (default: NULL). Password for online Git hosting service (e.g. GitHub or GitLab). The user is prompted if necessary. |
| dry_run | logical (default: FALSE). Preview the proposed action but do not actually pull from the remote repository. |
| project | character (default: ".") By default the function assumes the current working directory is within the project. If this is not true, you'll need to provide the path to the project directory. |

Details

wflow_git_pull tries to choose sensible defaults if the user does not explicitly specify the remote repository and/or the remote branch:

- If both `remote` and `branch` are NULL, wflow_git_pull checks to see if the current local branch is tracking a remote branch. If yes, it pulls to this tracked remote branch.
- If the argument `remote` is left as NULL and there is only one remote, it is used. If there is more than one remote, the one named "origin" is used.
- If the argument `branch` is left as NULL, the name of the current local branch is used (referred to as HEAD by Git).

Under the hood, wflow_git_pull is a wrapper for [pull](#) from the package [git2r](#).

Value

An object of class `wflow_git_pull`, which is a list with the following elements:

- **remote**: The remote repository.
- **branch**: The branch of the remote repository.
- **username**: Username for online Git hosting service (e.g. GitHub or GitLab).
- **merge_result**: The `git_merge_result` object returned by `git2r` (only included if `dry_run == FALSE`).
- **dry_run**: The input argument `dry_run`.

Examples

```
## Not run:

# Pull from remote repository
wflow_git_pull()
# Preview by running in dry run mode
wflow_git_pull(dry_run = TRUE)

## End(Not run)
```

| | |
|-----------------------------|--|
| <code>wflow_git_push</code> | <i>Push files to remote repository</i> |
|-----------------------------|--|

Description

`wflow_git_push` pushes the local files on your machine to your remote repository on a remote Git hosting service (e.g. GitHub or GitLab). This is a convenience function to run Git commands from the R console instead of the Terminal. The same functionality can be achieved by running `git push` in the Terminal.

Usage

```
wflow_git_push(remote = NULL, branch = NULL, username = NULL,
               password = NULL, force = FALSE, set_upstream = TRUE,
               dry_run = FALSE, project = ".")
```

Arguments

| | |
|-----------------------|---|
| <code>remote</code> | character (default: <code>NULL</code>). The name of the remote repository. See Details for the default behavior. |
| <code>branch</code> | character (default: <code>NULL</code>). The name of the branch to push to in the remote repository. If <code>NULL</code> , the name of the current local branch is used. |
| <code>username</code> | character (default: <code>NULL</code>). Username for online Git hosting service (e.g. GitHub or GitLab). The user is prompted if necessary. |

| | |
|--------------|--|
| password | character (default: NULL). Password for online Git hosting service (e.g. GitHub or GitLab). The user is prompted if necessary. |
| force | logical (default: FALSE). Force the push to the remote repository. Do not use this if you are not 100% sure of what it is doing. Equivalent to: <code>git push -f</code> |
| set_upstream | logical (default: TRUE). Set the current local branch to track the remote branch if it isn't already tracking one. This is likely what you want. Equivalent to: <code>git push -u remote branch</code> |
| dry_run | logical (default: FALSE). Preview the proposed action but do not actually push to the remote repository. |
| project | character (default: ".") By default the function assumes the current working directory is within the project. If this is not true, you'll need to provide the path to the project directory. |

Details

wflow_git_push tries to choose sensible defaults if the user does not explicitly specify the remote repository and/or the remote branch:

- If both `remote` and `branch` are NULL, wflow_git_push checks to see if the current local branch is tracking a remote branch. If yes, it pushes to this tracked remote branch.
- If the argument `remote` is left as NULL and there is only one remote, it is used. If there is more than one remote, the one named "origin" is used.
- If the argument `branch` is left as NULL, the name of the current local branch is used (referred to as HEAD by Git).

Under the hood, wflow_git_push is a wrapper for [push](#) from the package [git2r](#).

Value

An object of class `wflow_git_push`, which is a list with the following elements:

- **remote**: The remote repository.
- **branch**: The branch of the remote repository.
- **username**: Username for online Git hosting service (e.g. GitHub or GitLab).
- **force**: The input argument `force`.
- **dry_run**: The input argument `dry_run`.

Examples

```
## Not run:

# Push to remote repository
wflow_git_push()
# Preview by running in dry run mode
wflow_git_push(dry_run = TRUE)

## End(Not run)
```

wflow_git_remote *Manage remote Git repositories*

Description

wflow_git_remote is a convenience function for managing remote repositories from R. By default it displays the current remote repositories (analogous to `git remote -v`). It can add a remote, remove a remote, or update the URL for an existing remote.

Usage

```
wflow_git_remote(remote = NULL, user = NULL, repo = NULL,
  protocol = "https", action = "add", domain = "github.com",
  verbose = TRUE, project = ".")
```

Arguments

| | |
|----------|--|
| remote | character (default: NULL). The name of the remote. |
| user | character (default: NULL). The username for the remote repository. |
| repo | character (default: NULL). The name of the remote repository on the Git hosting service (e.g. GitHub or GitLab). |
| protocol | character (default: "https"). The protocol for communicating with the Git hosting service (e.g. GitHub or GitLab). Must be either "https" or "ssh". |
| action | character (default: "add"). The action to perform on the remotes. Must be one of "add", "remove", or "set_url". This argument is ignored if remote = NULL. |
| domain | character (default: "github.com"). The domain of the remote host. For example, if you want to host your Git repository at GitLab, you would specify "gitlab.com". |
| verbose | logical (default: TRUE). Display the current remotes. Analogous to <code>git remote -v</code> . |
| project | character (default: ".") By default the function assumes the current working directory is within the project. If this is not true, you'll need to provide the path to the project directory. |

Details

wflow_git_remote constructs a URL to a remote repository based on the input username, repository name, protocol (https or ssh), and domain (e.g. "github.com" or "gitlab.com"). It can add a remote (action = "add"), remove a remote (action = "remove"), or update the URL for an existing remote (action = "set_url").

This function cannot change the name of an existing remote. To accomplish this, you could run Git from the Terminal (`git remote rename <old> <new>`) or use `git2r::remote_rename` from R.

Value

Invisibly returns a named character vector of the remote URLs.

Examples

```
## Not run:

# Display the current remotes
wflow_git_remote()

# Add a remote called origin that points to the
# GitHub repository example_repo owned by
# the GitHub user example_user
wflow_git_remote("origin", "example_user", "example_repo")

# Remove the remote named upstream
wflow_git_remote("upstream", action = "remove")

# Change the protocol of the remote origin from https to ssh
wflow_git_remote("origin", "example_user", "example_repo", protocol = "ssh",
                 action = "set_url")

# Add a remote called origin that points to the
# GitLab repository example_repo owned by
# the GitLab user example_user
wflow_git_remote("origin", "example_user", "example_repo", domain = "gitlab.com")

## End(Not run)
```

wflow_html

Convert to a workflowr HTML document

Description

Workflowr custom format for converting from R Markdown to an HTML document. `wflow_html` has two distinct functionalities: 1) configure the formatting of the HTML by extending [html_document](#) (see the [RStudio documentation](#) for the available options), and 2) configure the workflowr reproducibility features (typically specified in a file named `_workflowr.yml`). `wflow_html` is intended to be used to generate webpages for a workflowr website, but it can also be used outside a workflowr project to implement reproducibility features for single R Markdown documents.

Usage

```
wflow_html(...)
```

Arguments

```
... Arguments passed to html\_document.
```

Value

An `output_format` object to pass to `render`.

HTML formatting

wflow_html extends [html_document](#). To set default formatting options to be shared across all of your HTML files, set them in the file `analysis/_site.yml`. This special file can also be used to configure other aspects of the website like the navigation bar (for more details see the documentation on [R Markdown websites](#)). For example, to use the theme "cosmo" and add a table of contents to every webpage, you would add the following to `analysis/_site.yml`:

```
output:
  workflowr::wflow_html:
    toc: true
    theme: cosmo
```

Formatting options can also be set for a specific file, which will override the default options set in `analysis/_site.yml`. For example, to remove the table of contents from one specific file, you would add the following to the YAML header of that file:

```
output:
  workflowr::wflow_html:
    toc: false
```

However, this will preserve any of the other shared options (e.g. the theme in the above example). If you are not overriding any of the shared options, it is not necessary to specify `wflow_html` in the YAML header of your workflowr R Markdown files.

Reproducibility features

wflow_html also implements the workflowr reproducibility features. For example, it automatically sets a seed with [set.seed](#); inserts the current code version (i.e. Git commit ID); runs [sessionInfo](#) at the end of the document; and inserts links to past versions of the file and figures.

These reproducibility options are not passed directly as arguments to `wflow_html`. Instead these options are specified in `_workflowr.yml` or in the YAML header of an R Markdown file (using the field `workflowr:`). These options (along with their default values) are as follows:

knit_root_dir The directory where code inside an R Markdown file is executed; this ultimately sets argument `knit_root_dir` in [render](#). By default, [wflow_start](#) sets `knit_root_dir` in the file `_workflowr.yml` to be the path `"."`. This path is a [relative path](#) from the location of `_workflowr.yml` to the directory for the code to be executed. The path `"."` is shorthand for "current working directory", and thus code is executed in the root of the workflowr project. You can change this to be a relative path to any subdirectory of your project. Also, if you were to delete this line from `_workflowr.yml`, then this would cause the code to be executed from the same directory in which the R Markdown files are located (i.e. `analysis/` in the default workflowr setup).

It is also possible (though in general not recommended) to configure the `knit_root_dir` to apply to only one of the R Markdown files by specifying it in the YAML header of that particular file. In this case, the supplied path is interpreted as relative to the R Markdown file itself. Thus `knit_root_dir: "../data"` would execute the code in the subdirectory `data/`.

seed The seed argument in the call to `set.seed`, which is added to the beginning of an R Markdown file. In `wflow_start`, this is set to the date using the format `YYYYMMDD`. If no seed is specified, the default is 12345.

sessioninfo The function that is run to record the session information. The default is `"sessionInfo()"`.

github The URL of the remote repository for creating links to past results. If unspecified, the URL is guessed from the "git remote" settings (see `wflow_git_remote`). Specifying this setting inside `_workflowr.yml` is especially helpful if multiple users are collaborating on a project since it ensures that everyone generates the same URLs.

In the default workflowr setup, the file `_workflowr.yml` is located in the root of the project. For most users it is best to leave it there, but if you are interested in experimenting with the directory layout, the `_workflowr.yml` file can be located in the same directory as the R Markdown files or in any directory upstream of that directory.

Here is an example of a customized `_workflowr.yml` file:

```
# Execute code in project directory
knit_root_dir: "."
# Set a custom seed
seed: 4815162342
# Use devtools to generate the session information.
sessioninfo: "devtools::session_info()"
# Use this URL when inserting links to past results.
github: https://github.com/repoowner/mainrepo
```

And here is an example of a YAML header inside an R Markdown file with the same exact custom settings as above:

```
---
title: "About"
output:
  workflowr::wflow_html:
    toc: false
workflowr:
  knit_root_dir: ".."
  seed: 4815162342
  sessioninfo: "devtools::session_info()"
  github: https://github.com/repoowner/mainrepo
---
```

Note that the path passed to `knit_root_dir` changed to `".."` because it is relative to the R Markdown file instead of `_workflowr.yml`. Both have the effect of having the code executed in the root of the workflowr project.

See Also

[wflow_pre_knit](#), [wflow_post_knit](#), [wflow_pre_processor](#)

| | |
|------------|---|
| wflow_open | <i>Open R Markdown analysis file(s)</i> |
|------------|---|

Description

wflow_open opens R Markdown files in RStudio and sets the working directory to the knit directory (see Details). If a file does not exist, a minimal one is created.

Usage

```
wflow_open(files, change_wd = TRUE, edit_in_rstudio = TRUE,
           project = ".")
```

Arguments

| | |
|-----------------|--|
| files | character. R Markdown file(s) to open. Files must have the extension Rmd or rmd. Supports file globbing . Set project = NULL to create an R Markdown file outside of the R Markdown directory of a workflow project. |
| change_wd | logical (default: TRUE). Change the working directory to the knit directory. If project = NULL, the working directory is not changed. |
| edit_in_rstudio | logical (default: TRUE). Open the file(s) in the RStudio editor. |
| project | character (or NULL). By default the function assumes the current working directory is within the project. If this is not true, you'll need to provide the path to the project directory. Set project = NULL if running this command to create a file for a non-workflow project. |

Details

wflow_open is a convenience function to make it easier to begin working, especially when starting a new analysis. First, it creates a new file if necessary and tries to make educated guesses about metadata like the title, author, and date. Second, it sets the working directory to the knit directory. The knit directory is where the code in the R Markdown files is executed, and may be defined via the field knit_root_dir in the file _workflwr.yml (see [wflow_html](#) for all the details). If this field is not defined, then the knit directory is the R Markdown directory. Third, it opens the file(s) in RStudio if applicable. The latter two side effects can be turned off if desired.

If you would like to create an R Markdown file with wflow_open for an analysis that is not part of a workflow project, set project = NULL. Otherwise wflow_open will throw an error. Note that the working directory is **not** changed when project = NULL.

Value

An object of class wflow_open, which is a list with the following elements:

| | |
|-----------|---|
| files | The input argument files as absolute paths. |
| change_wd | The input argument change_wd. |

| | |
|-----------------|---|
| edit_in_rstudio | The input argument edit_in_rstudio. |
| knit_root_dir | The knit directory (see wflow_html for details). This is NULL if project was set to NULL. |
| previous_wd | The working directory in which wflow_open was executed. |
| new_wd | The working directory that wflow_open changed to. The value is NULL if the working directory was not changed. |
| files_new | The subset of the input argument files that were newly created. Paths are absolute. |

Examples

```
## Not run:
wflow_open("analysis/model-data.Rmd")
# Multiple files
wflow_open(c("analysis/model-data.Rmd", "analysis/another-analysis.Rmd"))
# Open all R Markdown files
wflow_open("analysis/*Rmd")
# Create an R Markdown file in a non-workflow project
wflow_open("model-data.Rmd", project = NULL)

## End(Not run)
```

| | |
|-----------------|--|
| wflow_post_knit | <i>post_knit function for workflow</i> |
|-----------------|--|

Description

This is the post_knit function that [wflow_html](#) passes to the function [output_format](#) from the package [rmarkdown](#). For advanced usage only.

Usage

```
wflow_post_knit(metadata, input_file, runtime, encoding, ...)
```

Arguments

| | |
|------------|--|
| metadata | The metadata specified in the YAML header of the R Markdown file |
| input_file | Name of R Markdown file |
| runtime | The runtime target for rendering. The static option produces output intended for static files; shiny produces output suitable for use in a Shiny document (see run). The default, auto, allows the runtime target specified in the YAML metadata to take precedence, and renders for a static runtime target otherwise. |
| encoding | The encoding of the input file. See file for more information. |
| ... | arguments passed to the post_knit function of rmarkdown : :html_document |

Details

If you'd like to combine workflowr with another R Markdown output format, you may need to use `wflow_post_knit`. This function fixes the path to the R Markdown file (which is manipulated by `wflow_pre_knit`).

See Also

[wflow_html](#), [wflow_pre_knit](#), [wflow_pre_processor](#)

| | |
|----------------|--|
| wflow_pre_knit | <i>pre_knit function for workflowr</i> |
|----------------|--|

Description

This is the `pre_knit` function that `wflow_html` passes to the function `output_format` from the package `rmarkdown`. For advanced usage only.

Usage

```
wflow_pre_knit(input, ...)
```

Arguments

| | |
|--------------------|-------------------------|
| <code>input</code> | Name of R Markdown file |
| <code>...</code> | currently ignored |

Details

If you'd like to insert the workflowr reproducibility report into other R Markdown output formats such as `blogdown::html_page`, you can use `wflow_pre_knit`.

See Also

[wflow_html](#), [wflow_post_knit](#), [wflow_pre_processor](#)

wflow_pre_processor *pre_processor function for workflow*

Description

This is the `pre_processor` function that `wflow_html` passes to the function `output_format` from the package `rmarkdown`. For advanced usage only.

Usage

```
wflow_pre_processor(metadata, input_file, runtime, knit_meta, files_dir,
  output_dir)
```

Arguments

| | |
|-------------------------|--|
| <code>metadata</code> | The metadata specified in the YAML header of the R Markdown file |
| <code>input_file</code> | Name of Markdown file created by <code>knitr::knit</code> to be passed to <code>pandoc</code> |
| <code>runtime</code> | The runtime target for rendering. The <code>static</code> option produces output intended for static files; <code>shiny</code> produces output suitable for use in a Shiny document (see <code>run</code>). The default, <code>auto</code> , allows the runtime target specified in the YAML metadata to take precedence, and renders for a <code>static</code> runtime target otherwise. |
| <code>knit_meta</code> | (This option is reserved for expert use.) Metadata generated by knitr . |
| <code>files_dir</code> | Directory for saving intermediate files |
| <code>output_dir</code> | The output directory for the rendered <code>output_file</code> . This allows for a choice of an alternate directory to which the output file should be written (the default output directory of that of the input file). If a path is provided with a filename in <code>output_file</code> the directory specified here will take precedence. Please note that any directory path provided will create any necessary directories if they do not exist. |

Details

If you'd like to combine `workflowr` with another R Markdown output format, you may need to use `wflow_pre_processor`. This function only has minor effects on the style of the resulting HTML page, and is not essential for using `workflowr`.

See Also

[wflow_html](#), [wflow_pre_knit](#), [wflow_post_knit](#)

wflow_publish

*Publish the site***Description**

wflow_publish is the main workflowr function. Use it when you are ready to publish an analysis to your site. wflow_publish performs three steps: 1) commit the file(s) (can include both Rmd and non-Rmd files, e.g. _site.yml), 2) rebuild the R Markdown file(s), 3) commit the generated website file(s). These steps ensure that the version of the HTML file is created by the latest version of the R Markdown file, which is critical for reproducibility.

Usage

```
wflow_publish(files = NULL, message = NULL, all = FALSE,
             force = FALSE, update = FALSE, republish = FALSE,
             view = interactive(), delete_cache = FALSE, seed = 12345,
             verbose = FALSE, dry_run = FALSE, project = ".")
```

Arguments

| | |
|--------------|---|
| files | character (default: NULL). R Markdown files and other files to be added and committed with Git (step 1). Any R Markdown files will also be built (step 2) and their output HTML and figures will be subsequently committed (step 3). Supports file globbing . |
| message | character (default: NULL). A commit message. |
| all | logical (default: FALSE). Automatically stage files that have been modified and deleted. Equivalent to: <code>git commit -a</code> |
| force | logical (default: FALSE). Allow adding otherwise ignored files. Equivalent to: <code>git add -f</code> |
| update | logical (default: FALSE). Build any files that have been committed more recently than their corresponding HTML files (and do not have any unstaged or staged changes). This ensures that the commit version ID inserted into the HTML corresponds to the exact version of the source file that was used to produce it. |
| republish | logical (default: FALSE). Build all published R Markdown files (that do not have any unstaged or staged changes). Useful for site-wide changes like updating the theme, navigation bar, or any other setting in <code>_site.yml</code> . |
| view | logical (default: interactive). View the website with wflow_view after building files. If only one file is built, it is opened. If more than one file is built, the main index page is opened. Not applicable if no files are built or if <code>dry_run = TRUE</code> . |
| delete_cache | logical (default: FALSE). Delete the cache directory (if it exists) for each R Markdown file prior to building it. |
| seed | numeric (default: 12345). The seed to set before building each file. Passed to set.seed . DEPRECATED: The seed set here has no effect if you are using wflow_html as the output format defined in <code>_site.yml</code> . This argument is for backwards compatibility with previous versions of workflowr. |

| | |
|---------|--|
| verbose | logical (default: FALSE). Display the build log directly in the R console as each file is built. This is useful for monitoring long-running code chunks. |
| dry_run | logical (default: FALSE). Preview the proposed action but do not actually add or commit any files. |
| project | character (default: ".") By default the function assumes the current working directory is within the project. If this is not true, you'll need to provide the path to the project directory. |

Value

Returns an object of class `wflow_publish`, which is a list with the following elements:

- **step1**: An object of class `wflow_git_commit` from the first step of committing the files.
- **step2**: An object of class `wflow_build` from the second step of building the HTML files.
- **step3**: An object of class `wflow_git_commit` from the third step of committing the HTML files.

See Also

[wflow_git_commit](#), [wflow_build](#)

Examples

```
## Not run:
# single file
wflow_publish("analysis/file.Rmd", "Informative commit message")
# All tracked files that have been edited
wflow_publish(all = TRUE, message = "Informative commit message")
# A new file plus all tracked files that have been edited
wflow_publish("analysis/file.Rmd", "Informative commit message", all = TRUE)
# Multiple files
wflow_publish(c("analysis/file.Rmd", "analysis/another.Rmd"),
              "Informative commit message")
# All R Markdown files that start with the pattern "new_"
wflow_publish("analysis/new_*Rmd", "Informative commit message")
# Republish all published files even though they haven't been modified.
# Useful for changing some universal aspect of the site, e.g. the theme
# specified in _site.yml.
wflow_publish("analysis/_site.yml", "Informative commit message",
              republish = TRUE)
# Publish all previously published files that have been committed more
# recently than their corresponding HTML files. This is useful if you like to
# manually commit your R Markdown files.
wflow_publish(update = TRUE)

## End(Not run)
```

`wflow_remove`*Remove files*

Description

`wflow_remove` removes files. If the file to be removed is an R Markdown file, the corresponding HTML and other related files are also removed. If the workflowr project uses Git, `wflow_remove` commits the changes.

Usage

```
wflow_remove(files, message = NULL, git = TRUE, dry_run = FALSE,
             project = ".")
```

Arguments

| | |
|----------------------|--|
| <code>files</code> | character. Files to be removed. Supports file globbing . |
| <code>message</code> | character (default: NULL). A commit message. |
| <code>git</code> | logical (default: TRUE). Commit the changes (only applicable if Git repository is present). |
| <code>dry_run</code> | logical (default: FALSE). Preview the files to be removed but do not actually remove them. |
| <code>project</code> | character (default: ".") By default the function assumes the current working directory is within the project. If this is not true, you'll need to provide the path to the project directory. |

Value

An object of class `wflow_remove`, which is a list with the following elements:

- **files**: The relative path(s) to the removed file(s).
- **message**: The message describing the commit (if applicable).
- **dry_run**: The input argument `dry_run`.
- **commit**: The object returned by `git2r::commit` (only included if `dry_run == FALSE`).
- **files_git**: The relative path(s) to the file(s) removed from the Git repository.

See Also

[wflow_git_commit](#)

Examples

```
## Not run:

# Remove a single file
wflow_remove("analysis/file.Rmd", "Remove old analysis.")
# Remove multiple files
wflow_remove(c("analysis/file.Rmd", "output/small-data.txt"),
             "Remove old analysis and its associated data.")

## End(Not run)
```

wflow_rename

Rename files and directories

Description

wflow_rename renames files and directories. If the file to be renamed is an R Markdown file, the corresponding HTML and other related files are also renamed. If the workflowr project uses Git, wflow_rename commits the changes.

Usage

```
wflow_rename(files, to, message = NULL, git = TRUE, dry_run = FALSE,
             project = ".")
```

Arguments

| | |
|---------|--|
| files | character. Files to be renamed. Supports file globbing . |
| to | character. New names for the files. Must be the same length as files. |
| message | character (default: NULL). A commit message. |
| git | logical (default: TRUE). Commit the changes (only applicable if Git repository is present). |
| dry_run | logical (default: FALSE). Preview the files to be renamed but do not actually rename them. |
| project | character (default: ".") By default the function assumes the current working directory is within the project. If this is not true, you'll need to provide the path to the project directory. |

Value

An object of class wflow_rename, which is a list with the following elements:

- **files**: The relative path(s) to the renamed file(s).
- **to**: The new relative path(s) to rename the file(s).
- **message**: The message describing the commit (if applicable).

- **git**: The input argument `git`.
- **dry_run**: The input argument `dry_run`.
- **commit**: The object returned by `git2r::commit` (only included if `dry_run == FALSE`).
- **files_git**: The relative path(s) to the file(s) renamed from the Git repository.

See Also

[wflow_git_commit](#)

Examples

```
## Not run:

# rename a single file
wflow_rename("analysis/file.Rmd", "analysis/new.Rmd", "rename old analysis.")
# rename multiple files
wflow_rename(c("analysis/file.Rmd", "output/small-data.txt"),
             c("analysis/new.Rmd", "output/new-data.txt"),
             "rename old analysis and its associated data.")

## End(Not run)
```

wflow_site

Custom site generator for workflowr websites

Description

`wflow_site` is a **custom site generator** to be used in combination with the R Markdown output format `wflow_html`.

Usage

```
wflow_site(input, encoding = getOption("encoding"), ...)
```

Arguments

| | |
|-----------------------|--|
| <code>input</code> | character. The name of the website directory or a specific R Markdown file in the website directory. |
| <code>encoding</code> | character. The character encoding to use to read the file. |
| <code>...</code> | Placeholder for potential future use. |

Details

Do not call the function `wflow_site` directly. Instead insert the line below directly into the YAML header of the file `index.Rmd`:

```
---
title: "Home"
site: workflowr::wflow_site
output:
  workflowr::wflow_html:
    toc: false
---
```

Then you can build the website by running `render_site` in the R console or clicking the Knit button in RStudio.

If you receive an error when using the RStudio Knit button (the error is about an unused argument), make sure the Knit Directory is set to Document Directory (you can set this with the dropdown menu next to the Knit button).

See Also

[wflow_html](#), [render_site](#)

| | |
|-------------|--------------------------------------|
| wflow_start | <i>Start a new workflowr project</i> |
|-------------|--------------------------------------|

Description

`wflow_start` creates a directory with the essential files for a workflowr project. The default behaviour is to add these files to a new directory, but it is also possible to populate an existing directory. By default, the working directory is changed to the workflowr project directory.

Usage

```
wflow_start(directory, name = NULL, git = TRUE, existing = FALSE,
  overwrite = FALSE, change_wd = TRUE, disable_remote = FALSE,
  dry_run = FALSE, user.name = NULL, user.email = NULL)
```

Arguments

| | |
|-----------|---|
| directory | character. The directory where the workflowr project files will be added, e.g., <code>"~/my-wflow-project"</code> . When <code>existing = FALSE</code> , the directory will be created. |
| name | character (default: <code>NULL</code>). The name of the project, e.g. <code>"My Workflowr Project"</code> . When <code>name = NULL</code> , the project name is automatically determined based on <code>directory</code> . For example, if <code>directory = "~/projects/my-wflow-project"</code> , then <code>name</code> is set to <code>"my-wflow-project"</code> . The project name is displayed on the website's navigation bar and in the <code>README.md</code> file. |

| | |
|-----------------------------|--|
| <code>git</code> | logical (default: TRUE). Should the workflowr files be committed with Git? If <code>git = TRUE</code> and no existing Git repository is detected, <code>wflow_start</code> will initialize the repository and make an initial commit. If a Git repository already exists in the chosen directory, <code>wflow_start</code> any newly created or modified files will be committed to the existing repository. |
| <code>existing</code> | logical (default: FALSE). Indicate whether directory already exists. This argument is added to prevent accidental creation of files in an existing directory; setting <code>existing = FALSE</code> prevents files from being created if the specified directory already exists. |
| <code>overwrite</code> | logical (default: FALSE). Similar to <code>existing</code> , this argument prevents files from accidentally being overwritten when <code>overwrite = FALSE</code> . When <code>overwrite = TRUE</code> , any existing file in <code>directory</code> that has the same name as a workflowr file will be replaced by the workflowr file. When <code>git = TRUE</code> , all the standard workflowr files will be added and committed (regardless of whether they were overwritten or still contain the original content). |
| <code>change_wd</code> | logical (default: TRUE). Change the working directory to the <code>directory</code> . |
| <code>disable_remote</code> | logical (default: FALSE). Create a Git pre-push hook that prevents pushing to a remote Git repository (i.e. using <code>wflow_git_push</code>). This is useful for extremely confidential projects that cannot be shared via an online Git hosting service (e.g. GitHub or GitLab). The hook is saved in the file <code>.git/hooks/pre-push</code> . If you change your mind and want to push the repository, you can delete that file. Note that this option is only available if <code>git = TRUE</code> . Note that this is currently only supported for Linux and macOS. |
| <code>dry_run</code> | logical (default: FALSE). When <code>dry_run = TRUE</code> , the actions are previewed without executing them. |
| <code>user.name</code> | character (default: NULL). The user name used by Git to sign commits, e.g., "Ada Lovelace". This setting only applies to the workflowr project being created. To specify the global setting for the Git user name, use <code>wflow_git_config</code> instead. When <code>user.name = NULL</code> , no user name is recorded for the project, and the global setting will be used. This setting can be modified later by running <code>git config --local</code> in the Terminal. |
| <code>user.email</code> | character (default: NULL). The email address used by Git to sign commits, e.g., "ada.lovelace@ox.ac.uk". This setting only applies to the workflowr project being created. To specify the global setting for the Git email address, use <code>wflow_git_config</code> instead. When <code>user.name = NULL</code> , no email address is recorded for the project, and the global setting will be used. This setting can be modified later by running <code>git config --local</code> in the Terminal. |

Details

This is recommended function to set up the file infrastructure for a workflowr project. If you are using RStudio, you can also create a new workflowr project as an "RStudio Project Template". Go to "File" -> "New Project..." then select "workflowr project" from the list of project types. In the future, you can return to your project by choosing menu option "Open Project..." and selecting the `.Rproj` file located at the root of the workflowr project directory. In RStudio, opening this file will change the working directory to the appropriate location, set the file navigator to the workflowr project directory, and configure the Git pane.

wflow_start populates the chosen directory with the following files:

```
|--- .gitignore
|--- .Rprofile
|--- _workflowr.yml
|--- analysis/
|   |--- about.Rmd
|   |--- index.Rmd
|   |--- license.Rmd
|   |--- _site.yml
|--- code/
|   |--- README.md
|--- data/
|   |--- README.md
|--- docs/
|--- <directory>.Rproj
|--- output/
|   |--- README.md
|--- README.md
```

The two **required** subdirectories are `analysis/` and `docs/`. These directories should never be removed from the workflowr project.

`analysis/` contains all the source R Markdown files that implement the analyses for your project. It contains a special R Markdown file, `index.Rmd`, that typically does not include R code, and is will be used to generate `index.html`, the homepage for the project website. Additionally, this directory contains the important configuration file `_site.yml`. The website theme, navigation bar, and other properties can be controlled through this file (for more details see the documentation on [R Markdown websites](#)). Do not delete `index.Rmd` or `_site.yml`.

`docs/` will contain all the webpages generated from the R Markdown files in `analysis/`. Any figures generated by rendering the R Markdown files are also stored here. Each figure is saved according to the following convention: `docs/figure/<Rmd-filename>/<chunk-name>-#.png`, where # corresponds to which of the plots the chunk generated (one chunk can produce several plots).

`_workflowr.yml` is an additional configuration file used only by workflowr. It is used to apply the workflowr reproducibility checks consistently across all R Markdown files. The most important setting is `knit_root_dir` which determines the directory where the scripts in `analysis/` are executed. The default is to run code from the project root (*i.e.*, `"."`). To execute the code from `analysis/`, for example, change the setting to `knit_root_dir: "analysis"`. See [wflow_html](#) for more details.

Another required file is the RStudio project file (ending in `.Rproj`). *Do not delete this file even if you do not use RStudio; among other essential tasks, it is used to determine the project root directory.*

The **optional** directories are `data/`, `code/`, and `output/`. These directories are suggestions for organizing your workflowr project and can be removed if you do not find them relevant to your project.

`data/` should be used to store "raw" (unprocessed) data files.

code/ should be used to store additional code that might not be appropriate to include in R Markdown files (e.g., code to preprocess the data, long-running scripts, or functions that are used in multiple R Markdown files).

output/ should be used to store processed data files and other outputs generated from the code and analyses. For example, scripts in code/ that pre-process raw data files from data/ should save the processed data files in output/.

All these subdirectories except for docs/ include a README file summarizing the contents of the subdirectory, and can be modified as desired, for example, to document the files stored in each directory.

.Rprofile is an optional file in the root directory of the workflowr project containing R code that is executed whenever the .Rproj file is loaded in RStudio, or whenever R is started up inside the project root directory. This file includes the line of code `library("workflowr")` to ensure that the workflowr package is loaded.

Finally, .gitignore is an optional file that indicates to Git which files should be ignored—that is, files that are never committed to the repository. Some suggested files to ignore such as .Rhistory and .Rdata are listed here.

Value

An object of class `wflow_start`, which is a list with the following elements:

| | |
|-----------------------------|---|
| <code>directory</code> | The input argument <code>directory</code> . |
| <code>name</code> | The input argument <code>name</code> . |
| <code>git</code> | The input argument <code>git</code> . |
| <code>existing</code> | The input argument <code>existing</code> . |
| <code>overwrite</code> | The input argument <code>overwrite</code> . |
| <code>change_wd</code> | The input argument <code>change_wd</code> . |
| <code>disable_remote</code> | The input argument <code>disable_remote</code> . |
| <code>dry_run</code> | The input argument <code>dry_run</code> . |
| <code>user.name</code> | The input argument <code>user.name</code> . |
| <code>user.email</code> | The input argument <code>user.email</code> . |
| <code>commit</code> | The object returned by <code>git2r::commit</code> , or NULL if <code>git = FALSE</code> . |

Note

Do not delete the file `.Rproj` even if you do not use RStudio; workflowr will not work correctly unless this file is there.

See Also

`vignette("wflow-01-getting-started")`

Examples

```
## Not run:

wflow_start("path/to/new-project")

# Provide a custom name for the project.
wflow_start("path/to/new-project", name = "My Project")

# Preview what wflow_start would do
wflow_start("path/to/new-project", dry_run = TRUE)

# Add workflow files to an existing project.
wflow_start("path/to/current-project", existing = TRUE)

# Add workflow files to an existing project, but do not automatically
# commit them.
wflow_start("path/to/current-project", git = FALSE, existing = TRUE)

## End(Not run)
```

wflow_status

Report status of workflow project

Description

wflow_status reports the analysis files that require user action.

Usage

```
wflow_status(files = NULL, project = ".")
```

Arguments

| | |
|---------|--|
| files | character (default: NULL) The analysis file(s) to report the status. By default checks the status of all analysis files. Supports file globbing . |
| project | character (default: ".") By default the function assumes the current working directory is within the project. If this is not true, you'll need to provide the path to the project directory. |

Details

wflow_status reports analysis files with one of the following statuses:

- **Mod:** Modified file. Any published file that has been modified since the last time the HTML was published.
- **Unp:** Unpublished file. Any tracked file whose corresponding HTML is not tracked. May or may not have staged or unstaged changes.

- **Scr**: Scratch file. Any untracked file that is not specifically ignored.

wflow_status only works for workflow projects that use Git.

Value

Returns an object of class wflow_status, which is a list with the following elements:

- **root**: The relative path to the root directory of the workflowr project (i.e. contains the RStudio .Rproj file).
- **analysis**: The relative path to the directory that contains _site.yml and the R Markdown files.
- **docs**: The relative path to the directory that contains the HTML files and figures.
- **git**: The relative path to the .git directory that contains the history of the Git repository.
- **status**: A data frame with detailed information on the status of each file (see below).

The data frame status contains the following non-mutually exclusive columns (all logical vectors):

- **ignored**: The R Markdown file has been ignored by Git according to the patterns in the file .gitignore.
- **mod_unstaged**: The R Markdown file has unstaged modifications.
- **conflicted**: The R Markdown file has merge conflicts.
- **mod_staged**: The R Markdown file has staged modifications.
- **tracked**: The R Markdown file is tracked by Git.
- **committed**: The R Markdown file has been previously committed to the Git repository.
- **published**: The corresponding HTML file has been previously committed.
- **mod_committed**: The R Markdown file has modifications that have been committed since the last time the HTML was built and committed.
- **modified**: The R Markdown file has been modified since it was last published (i.e. mod_unstaged or mod_staged or mod_committed).
- **unpublished**: The R Markdown file is tracked by Git but not published (i.e. the HTML has not been committed).
- **scratch**: The R Markdown file is untracked by Git, i.e. it is considered a scratch file until it is committed.

Examples

```
## Not run:

wflow_status()
# Get status of specific file(s)
wflow_status("analysis/file.Rmd")
# Save the results
s <- wflow_status()

## End(Not run)
```

| | |
|--------------|-----------------------------------|
| wflow_update | <i>Update a workflowr project</i> |
|--------------|-----------------------------------|

Description

Update an existing workflowr project to workflowr 1.0.

Usage

```
wflow_update(dry_run = TRUE, project = ".")
```

Arguments

| | |
|---------|--|
| dry_run | logical (default: TRUE). Preview the files to be updated. |
| project | character (default: ".") By default the function assumes the current working directory is within the project. If this is not true, you'll need to provide the path to the project directory. |

Details

By default, wflow_update is run in dry_run mode so that no unwanted changes are made. Here's how to update an existing project to workflowr 1.0:

```
# Preview the files that will be updated
wflow_update()
# Update the files
wflow_update(dry_run = FALSE)
# Preview the updates
wflow_build()
# Publish the updates
wflow_publish("_workflowr.yml", "Update to 1.0", all = TRUE)
```

Currently wflow_update checks for the following items:

- Adds the site generator site: workflowr::wflow_site to index.Rmd
- Replaces `html_document` with `workflowr::wflow_html` in `_site.yml` and the YAML header of the R Markdown files
- Deletes `analysis/chunks.R`
- Removes the imported chunks in the R Markdown files
- Adds a `_workflowr.yml` file, but does not change any of the options (so that your site will continue to produce the same results)
- Removes the workflowr line from `include/footer.html` (this is now inserted automatically by `wflow_html`)

Value

A character vector of the updated files.

Examples

```
## Not run:

# Preview the files to be updated
wflow_update()
# Update the files
wflow_update(dry_run = FALSE)

## End(Not run)
```

wflow_use_github *Deploy site with GitHub*

Description

wflow_use_github automates all the local configuration necessary to deploy your workflowr project with [GitHub Pages](#). However, you will need to manually login to your account and create the new repository on GitHub. The final step is to run wflow_git_push in the R console.

Usage

```
wflow_use_github(username = NULL, repository = NULL,
  navbar_link = TRUE, protocol = "https", domain = "github.com",
  project = ".")
```

Arguments

| | |
|-------------|---|
| username | character (default: NULL). The GitHub username for the remote repository. If not specified, workflowr will attempt to guess this from the current remote named "origin" if it had previously been configured. |
| repository | character (default: NULL). The name of the remote repository on GitHub. If not specified, workflowr will attempt to guess this from the current remote named "origin" if it had previously been configured. |
| navbar_link | logical (default: TRUE). Insert a link to the GitHub repository into the navigation bar. |
| protocol | character (default: "https"). The protocol for communicating with GitHub. Must be either "https" or "ssh". |
| domain | character (default: "github.com"). The domain of the remote host. You only need to change this if your organization is using GitHub Enterprise. |
| project | character (default: ".") By default the function assumes the current working directory is within the project. If this is not true, you'll need to provide the path to the project directory. |

Details

wflow_use_github performs the following steps and then commits the changes:

- Adds a link to the GitHub repository in the navigation bar
- Configures the Git remote settings to use GitHub
- (Only if necessary) Renames the website directory to docs/
- (Only if necessary) Edits the setting output_dir in the file _site.yml to save the website files in docs/

For more details, read the documentation provided by [GitHub Pages](#).

Value

Invisibly returns a list of class wflow_use_github. This is currently for internal use only. Please open an Issue if you'd like to use this information.

See Also

[wflow_git_push](#), [wflow_git_remote](#), [wflow_use_gitlab](#)

Examples

```
## Not run:  
  
wflow_use_github("your-username", "name-of-repository")  
# Login with GitHub account and create new repository  
wflow_git_push()  
  
## End(Not run)
```

| | |
|------------------|--------------------------------|
| wflow_use_gitlab | <i>Deploy site with GitLab</i> |
|------------------|--------------------------------|

Description

wflow_use_gitlab automates all the local configuration necessary to deploy your workflow project with [GitLab Pages](#). However, you will need to manually login to your account and create the new repository on GitLab. The final step is to run wflow_git_push in the R console.

Usage

```
wflow_use_gitlab(username = NULL, repository = NULL,  
  navbar_link = TRUE, protocol = "https", domain = "gitlab.com",  
  project = ".")
```

Arguments

| | |
|-------------|--|
| username | character (default: NULL). The GitLab username for the remote repository. If not specified, workflowr will attempt to guess this from the current remote named "origin" if it had previously been configured. |
| repository | character (default: NULL). The name of the remote repository on GitLab. If not specified, workflowr will attempt to guess this from the current remote named "origin" if it had previously been configured. |
| navbar_link | logical (default: TRUE). Insert a link to the GitLab repository into the navigation bar. |
| protocol | character (default: "https"). The protocol for communicating with GitLab. Must be either "https" or "ssh". |
| domain | character (default: "gitlab.com"). The domain of the remote host. You only need to change this if you are using a custom GitLab instance hosted by your organization. For example, "git.rcc.uchicago.edu" is the domain for the GitLab instance hosted by the University of Chicago Research Computing Center. |
| project | character (default: ".") By default the function assumes the current working directory is within the project. If this is not true, you'll need to provide the path to the project directory. |

Details

wflow_use_gitlab performs the following steps and then commits the changes:

- Renames the website directory from docs/ to public/
- Edits the setting output_dir in the file _site.yml to save the website files in public/
- Adds a link to the GitLab repository in the navigation bar
- Creates the required file .gitlab-ci.yml
- Configures the Git remote settings to use GitLab

For more details, read the documentation provided by [GitLab Pages](#).

Value

Invisibly returns a list of class wflow_use_gitlab. This is currently for internal use only. Please open an Issue if you'd like to use this information.

See Also

[wflow_git_push](#), [wflow_git_remote](#), [wflow_use_github](#)

Examples

```
## Not run:  
  
wflow_use_gitlab("your-username", "name-of-repository")  
# Login with GitLab account and create new repository  
wflow_git_push()
```

```
## End(Not run)
```

wflow_view

View research website locally

Description

wflow_view displays the website locally in your browser or the RStudio Viewer pane.

Usage

```
wflow_view(files = NULL, latest = FALSE, dry_run = FALSE,  
           project = ".")
```

Arguments

| | |
|---------|---|
| files | character (default: NULL). Name(s) of the specific file(s) to view. These can be either the name(s) of the R Markdown file(s) in the analysis directory or the HTML file(s) in the docs directory. Supports file globbing . |
| latest | logical (default: FALSE). Display the HTML file with the most recent modification time (in addition to those specified in files). If files = NULL and latest = FALSE, then index.html is viewed. |
| dry_run | logical (default: FALSE). Do not actually view file(s). Mainly useful for testing. |
| project | character (default: ".") By default the function assumes the current working directory is within the project. If this is not true, you'll need to provide the path to the project directory. |

Details

wflow_view by default displays the file index.html. To view the most recently modified HTML file, set latest = TRUE. To specify which file(s) to view, specify either the name(s) of the R Markdown or HTML file(s).

wflow_view uses [browseURL](#) to view the HTML files in the browser. If you wish to do something non-traditional like view an HTML file that is not in the docs directory or not part of a workflow project, you can use that function directly.

If wflow_view is run in the RStudio IDE and only one file has been requested to be viewed, the file is displayed in the [RStudio Viewer](#).

If R has no default browser set (determined by `getOption("browser")`), then wflow_view cannot open any HTML files. See [browseURL](#) for setup instructions.

Value

An object of class `wflow_view`, which is a list with the following elements:

| | |
|----------------------|--|
| <code>files</code> | The input argument <code>files</code> (converted to relative paths). |
| <code>latest</code> | The input argument <code>latest</code> . |
| <code>dry_run</code> | The input argument <code>dry_run</code> . |
| <code>browser</code> | Logical indicating if a default browser has been set. If <code>FALSE</code> , no HTML files can be opened. This is determined by the value returned by <code>getOption("browser")</code> . |
| <code>opened</code> | The HTML files opened by <code>wflow_view</code> . |

See Also

[browseURL](#)

Examples

```
## Not run:  
  
# View index.html  
wflow_view()  
  
# View the most recently modified HTML file  
wflow_view(latest = TRUE)  
  
# View a file by specifying the R Markdown file  
wflow_view("analysis/fname.Rmd")  
  
# View a file by specifying the HTML file  
wflow_view("docs/fname.html")  
  
# View multiple files  
wflow_view(c("fname1.Rmd", "fname2.Rmd"))  
wflow_view("docs/*html")  
  
## End(Not run)
```

workflowr

workflowr: A workflow template for creating a research website

Description

The `workflowr` package helps you create a research website using R Markdown and Git.

Vignettes

Run `browseVignettes("workflowr")` to read the package vignettes locally. Alternatively you can read the documentation online at <https://jdblischak.github.io/workflowr>.

Main workflow functions

- [wflow_start](#) Start a workflowr project.
- [wflow_build](#) Build the site to view locally.
- [wflow_publish](#) Publish analyses to include in the website.
- [wflow_status](#) Report status of analysis files.

Supporting workflow functions

For further information on workflowr, see the help pages for these functions:

- [wflow_html](#) More technical details about how individual R Markdown files are converted to web-pages, and how the rendering settings can be customized.
- [wflow_site](#) This help page explains how project-wide rendering settings can be customized in the `_site.yml` file.

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