

Package ‘gistr’

July 3, 2015

Title Work with 'GitHub' 'Gists'

Description Work with 'GitHub' 'gists' from 'R' (e.g., <http://en.wikipedia.org/wiki/GitHub#Gist>, <https://help.github.com/articles/about-gists/>). A 'gist' is simply one or more files with code/text/images/etc. This package allows the user to create new 'gists', update 'gists' with new files, rename files, delete files, get and delete 'gists', star and 'un-star' 'gists', fork 'gists', open a 'gist' in your default browser, get embed code for a 'gist', list 'gist' 'commits', and get rate limit information when 'authenticated'. Some requests require authentication and some do not. 'Gists' website: <https://gist.github.com/>.

Version 0.3.0

License MIT + file LICENSE

URL <https://github.com/ropensci/gistr>

BugReports <http://www.github.com/ropensci/gistr/issues>

VignetteBuilder knitr

Imports utils, methods, stats, jsonlite, httr, magrittr, assertthat, knitr, rmarkdown, dplyr

Suggests roxygen2, testthat

NeedsCompilation no

Author Ramnath Vaidyanathan [aut],
Karthik Ram [aut],
Scott Chamberlain [aut, cre]

Maintainer Scott Chamberlain <myrmecocystus@gmail.com>

Repository CRAN

Date/Publication 2015-07-03 05:44:51

R topics documented:

gistr-package	2
add_files	3
browse	3

commits	4
delete	4
embed	5
fork	5
forks	6
gist	7
gists	8
gist_auth	9
gist_create	10
gist_create_obj	12
gist_map	14
gist_save	14
rate_limit	15
run	16
star	17
tabl	18
update	19
Index	21

gistr-package	<i>R client for GitHub gists</i>
---------------	----------------------------------

Description

R client for GitHub gists.

Details

gistr allows you to perform actions on gists, including listing, forking, starring, creating, deleting, updating, etc.

There are two ways to authorise gistr to work with your GitHub account:

- Generate a personal access token (PAT) at <https://help.github.com/articles/creating-an-access-token-for> and record it in the GITHUB_PAT envvar.
- Interactively login into your GitHub account and authorise with OAuth.

Using the GITHUB_PAT is recommended.

Author(s)

Scott Chamberlain <myrmecocystus@gmail.com>

Ramnath Vaidyanathan <ramnath.vaidya@gmail.com>

Karthik Ram <karthik.ram@gmail.com>

add_files	<i>Add files to a gist object</i>
-----------	-----------------------------------

Description

Add files to a gist object

Usage

```
add_files(gist, ...)  
  
update_files(gist, ...)  
  
delete_files(gist, ...)  
  
rename_files(gist, ...)
```

Arguments

gist	A gist object or something coerceable to a gist
...	Curl options passed on to GET

Examples

```
## Not run:  
add_files("~/stuff.Rmd")  
# update_files()  
# delete_files()  
# rename_files()  
  
## End(Not run)
```

browse	<i>Open a gist on GitHub</i>
--------	------------------------------

Description

Open a gist on GitHub

Usage

```
browse(gist, what = "html")
```

Arguments

gist	A gist object or something that can be coerced to a gist object.
what	One of html (default), json, forks, commits, or comments.

commits	<i>List gist commits</i>
---------	--------------------------

Description

List gist commits

Usage

```
commits(gist, page = NULL, per_page = 30, ...)
```

Arguments

gist	A gist object or something coerceable to a gist
page	(integer) Page number to return.
per_page	(integer) Number of items to return per page. Default 30. Max 100.
...	Further named args to GET

Examples

```
## Not run:
gists()[[1]] %>% commits()
gist(id = '1f399774e9ecc9153a6f') %>% commits(per_page = 5)

# pass in a url
gist("https://gist.github.com/expersso/4ac33b9c00751fddc7f8") %>% commits

## End(Not run)
```

delete	<i>Delete a gist</i>
--------	----------------------

Description

Delete a gist

Usage

```
delete(gist, ...)
```

Arguments

gist	A gist object or something coerceable to a gist
...	Curl options passed on to GET

Examples

```
## Not run:
gists("minepublic")[[29]] %>% delete()

## End(Not run)
```

embed	<i>Get embed script for a gist</i>
-------	------------------------------------

Description

Get embed script for a gist

Usage

```
embed(gist)
```

Arguments

gist A gist object or something that can be coerced to a gist object.

Examples

```
## Not run:
gists()[[1]] %>% embed()

# pass in a url
gist("https://gist.github.com/expersso/4ac33b9c00751fddc7f8") %>% embed

## End(Not run)
```

fork	<i>Fork a gist</i>
------	--------------------

Description

Fork a gist

Usage

```
fork(gist, ...)
```

Arguments

gist A gist object or something coerceable to a gist
... Further named args to [GET](#)

Value

A gist class object

Examples

```
## Not run:
# fork a gist
gists()[[1]] %>% fork()

# browse to newly forked gist
gist(id='0831f3fbd83ac4d46451') %>% fork() %>% browse()

# extract the last one
gist(id='1642874') %>%
  forks() %>%
  .[length(.)]

## End(Not run)
```

forks

List forks on a gist

Description

List forks on a gist

Usage

```
forks(gist, page = NULL, per_page = 30, ...)
```

Arguments

gist	A gist object or something coerceable to a gist
page	(integer) Page number to return.
per_page	(integer) Number of items to return per page. Default 30. Max 100.
...	Further named args to GET

Value

A list of gist class objects

Examples

```
## Not run:
gist(id='1642874') %>% forks(per_page=2)
gist(id = "8172796") %>% forks()

# pass in a url
gist("https://gist.github.com/expersso/4ac33b9c00751fddc7f8") %>% forks

## End(Not run)
```

gist	<i>Get a gist</i>
------	-------------------

Description

Get a gist

Usage

```
gist(id, ...)

as.gist(x)
```

Arguments

id	(character) A gist id, or a gist URL
...	Curl options passed on to GET
x	Object to coerce. Can be an integer (gist id), string (gist id), a gist, or an list that can be coerced to a gist.

Details

If a file is larger than ~1 MB, the content of the file given back is truncated, so you won't get the entire contents. In the return S3 object that's printed, we tell you at the bottom whether each file is truncated or not. If a file is, simply get the `raw_url` URL for the file (see example below), then retrieve from that. If the file is very big, you may need to clone the file using git, etc.

Examples

```
## Not run:
gist('f1403260eb92f5dfa7e1')

as.gist('f1403260eb92f5dfa7e1')
as.gist(10)
as.gist(gist('f1403260eb92f5dfa7e1'))

# from a url, or partial url
x <- "https://gist.github.com/expersso/4ac33b9c00751fddc7f8"
```

```

x <- "gist.github.com/expersso/4ac33b9c00751fddc7f8"
x <- "gist.github.com/4ac33b9c00751fddc7f8"
x <- "expersso/4ac33b9c00751fddc7f8"
as.gist(x)

ids <- sapply(gists(), "[[", "id")
gist(ids[1])
gist(ids[2])
gist(ids[3])
gist(ids[4])

gist(ids[1]) %>% browse()

## If a gist file is > a certain size it is truncated
## in this case, we let you know in the return object that it is truncated
## e.g.
(bigfile <- gist(id = "b74b878fd7d9176a4c52"))
## then get the raw_url, and retrieve the file
url <- bigfile$files$plossmall.json$raw_url
# httr::GET(url)

## End(Not run)

```

gists

List gists

Description

List public gists, your own public gists, all your gists, by gist id, or query by date.

Usage

```
gists(what = "public", since = NULL, page = NULL, per_page = 30, ...)
```

Arguments

what	(character) What gists to return. One of public, minepublic, mineall, or starred. If an id is given for a gist, this parameter is ignored.
since	(character) A timestamp in ISO 8601 format: YYYY-MM-DDTHH:MM:SSZ. Only gists updated at or after this time are returned.
page	(integer) Page number to return.
per_page	(integer) Number of items to return per page. Default 30. Max 100.
...	Curl options passed on to GET

Examples

```
## Not run:
# Public gists
gists()
gists(per_page=2)
gists(page=3)
# Public gists created since X time
gists(since='2014-05-26T00:00:00Z')
# Your public gists
gists('minepublic')
gists('minepublic', per_page=2)
# Your private and public gists
gists('mineall')
# Your starred gists
gists('starred')
# pass in curl options
gists(per_page=1, config=verbose())
gists(per_page=1, config=timeout(seconds = 0.5))

## End(Not run)
```

gist_auth

Authorize with GitHub.

Description

This function is run automatically to allow gistr to access your GitHub account.

Usage

```
gist_auth(app = gistr_app, reauth = FALSE)
```

Arguments

app	An oauth_app for GitHub. The default uses an application gistr_oauth created by Scott Chamberlain.
reauth	(logical) Force re-authorization?

Details

There are two ways to authorise gistr to work with your GitHub account:

- Generate a personal access token at <https://help.github.com/articles/creating-an-access-token-for-comm> and record in the GITHUB_PAT envvar.
- Interactively login into your GitHub account and authorise with OAuth.

Using GITHUB_PAT is recommended.

Examples

```
## Not run:
gist_auth()

## End(Not run)
```

gist_create	<i>Create a gist</i>
-------------	----------------------

Description

Create a gist

Usage

```
gist_create(files = NULL, description = "", public = TRUE,
  browse = TRUE, code = NULL, filename = "code.R", knit = FALSE,
  knitopts = list(), renderopts = list(), include_source = FALSE,
  imgur_inject = FALSE, rmarkdown = FALSE, ...)
```

Arguments

files	Files to upload
description	(character) Brief description of gist (optional)
public	(logical) Whether gist is public (default: TRUE)
browse	(logical) To open newly create gist in default browser (default: TRUE)
code	Pass in any set of code. This can be a single R object, or many lines of code wrapped in quotes, then curly brackets (see examples below).
filename	Name of the file to create, only used if code parameter is used. Default to code.R
knit	(logical) Knit code before posting as a gist? If the file has a .Rmd or .Rnw extension, we run the file with <code>link[knitr]{knit}</code> , and if it has a .R extension, then we use <code>render</code>
knitopts, renderopts	(list) List of variables passed on to <code>link[knitr]{knit}</code> , or <code>render</code>
include_source	(logical) Only applies if knit=TRUE. Include source file in the gist in addition to the knitted output.
imgur_inject	(logical) Inject <code>imgur_upload</code> into your .Rmd file to upload files to http://imgur.com/ . This will be ignored if the file is a sweave/latex file because the rendered pdf can't be uploaded anyway. Default: FALSE
rmarkdown	(logical) If TRUE, use <code>render</code> instead of <code>knit</code> to render the document.
...	Further args passed on to <code>link[httr]{POST}</code>

See Also[gist_create_obj](#)**Examples**

```
## Not run:
gist_create(files=~/"stuff.md", description='a new cool gist')
gist_create(files=c("~/spocc_sp.Rmd", "~/spocc_sp.md"), description='spocc demo files')

# include any code by passing to the code parameter
gist_create(code={'
x <- letters
numbers <- runif(10)
numbers
'})

# or include results if you want, and change the filename in this case
gist_create(code={'
x <- letters
numbers <- runif(8)
numbers

[1] 0.3229318 0.5933054 0.7778408 0.3898947 0.1309717 0.7501378 0.3206379 0.3379005
'}, filename="my_cool_code.R")

# Knit an .Rmd file before posting as a gist
file <- system.file("examples", "stuff.Rmd", package = "gistr")
gist_create(file, description='a new cool gist', knit=TRUE)

file <- system.file("examples", "plots.Rmd", package = "gistr")
gist_create(file, description='some plots', knit=TRUE)

# an .Rnw file
file <- system.file("examples", "rnw_example.Rnw", package = "gistr")
gist_create(file)
gist_create(file, knit=TRUE)

# Knit code input before posting as a gist
gist_create(code={'
````{r}
x <- letters
(numbers <- runif(8))
````
'}, knit=TRUE)

library('httr')
base <- "http://pelias.mapzen.com/search"
res <- GET(base, query = list(input = 'coffee shop', lat = 45.5, lon = -122.6))
json <- content(res, as = "text")
gist_create(code = json, filename = "pelias_test.geojson")

# Knit and include source file, so both files are in the gist
```

```

file <- system.file("examples", "stuff.Rmd", package = "gistr")
gist_create(file, knit=TRUE, include_source=TRUE)

gist_create(code={'
  ``{r}
  x <- letters
  (numbers <- runif(8))
  ``
'}, filename="code.Rmd", knit=TRUE, include_source=TRUE)

# Uploading images created during knit process
## using imgur - if you're file uses imgur or similar, you're good
file <- system.file("examples", "plots_imgur.Rmd", package = "gistr")
cat(readLines(file), sep = "\n") # peek at file
gist_create(file, knit=TRUE)
## if not, GitHub doesn't allow upload of binary files via the HTTP API (which gistr uses)
## but check back later as I'm working on an option to get binary files uploaded,
## but will involve having to use git
file <- system.file("examples", "plots.Rmd", package = "gistr")
gist_create(file, knit=TRUE, imgur_inject = TRUE)
## works with ggplot2 as well
file <- system.file("examples", "ggplot_imgur.Rmd", package = "gistr")
gist_create(file, knit=TRUE)

# Render `.R` files
file <- system.file("examples", "example1.R", package = "gistr")
cat(readLines(file), sep = "\n") # peek at file
gist_create(file, knit = TRUE)
gist_create(file, knit = TRUE, include_source = TRUE)
## many files
(file1 <- system.file("examples", "example1.R", package = "gistr"))
(file2 <- system.file("examples", "example2.R", package = "gistr"))
cat(readLines(file1), sep = "\n") # peek at file
cat(readLines(file2), sep = "\n") # peek at file
gist_create(files=list(file1, file2), knit = TRUE)
### three at once, some .R and some .Rmd
file3 <- system.file("examples", "plots_imgur.Rmd", package = "gistr")
gist_create(files=list(file1, file2, file3), knit = TRUE)
gist_create(files=list(file1, file2, file3), knit = TRUE, include_source = TRUE)

# Use rmarkdown::render instead of knitr::knit
file <- system.file("examples", "rmarkdown_eg.Rmd", package = "gistr")
gist_create(file, knit = TRUE, rmarkdown = TRUE, imgur_inject = TRUE,
  renderopts = list(output_format = "md_document"))

## End(Not run)

```

Description

Create a gist from an R object

Usage

```
gist_create_obj(x = NULL, description = "", public = TRUE,  
  browse = TRUE, pretty = TRUE, filename = "file.txt", ...)
```

Arguments

| | |
|-------------|---|
| x | An R object, any of data.frame, matrix, list, character, numeric |
| description | (character) Brief description of gist (optional) |
| public | (logical) Whether gist is public (default: TRUE) |
| browse | (logical) To open newly create gist in default browser (default: TRUE) |
| pretty | (logical) For data.frame and matrix objects, create a markdown table. If FALSE, pushes up json. (default: TRUE) |
| filename | Name of the file to create. Default: file.txt |
| ... | Further args passed on to link[httr]{POST} |

Details

This function is specifically for going from R objects to a gist, whereas [gist_create](#) is for going from files or executing code

See Also

[gist_create](#)

Examples

```
## Not run:  
## data.frame  
### by default makes pretty table in markdown format  
row.names(mtcars) <- NULL  
gist_create_obj(mtcars)  
gist_create_obj(iris)  
### or just push up json  
gist_create_obj(mtcars, pretty = FALSE)  
  
## matrix  
gist_create_obj(as.matrix(mtcars))  
## list  
gist_create_obj(apply(mtcars, 1, as.list))  
## character  
gist_create_obj("hello, world")  
## numeric  
gist_create_obj(runif(10))  
  
## Assign a specific file name
```

```

gist_create_obj("
## header2

hey there!", filename = "my_markdown.md")

## End(Not run)

```

| | |
|----------|---|
| gist_map | <i>Opens a full screen map after uploading a geojson file</i> |
|----------|---|

Description

Takes a gist object and a input geojson file name and renders fullscreen map

Usage

```
gist_map(x, browse = TRUE)
```

Arguments

| | |
|--------|--|
| x | An object of class <code>gist</code> generated by gist_create or gist_create_obj |
| browse | Default: TRUE. Set to FALSE if you don't want to automatically browse to the URL. |

Examples

```

## Not run:
file <- system.file("examples", "ecoengine_eg.geojson", package = "gistr")
gist_id <- gist_create(file, browse = FALSE)
gist_map(gist_id)

## End(Not run)

```

| | |
|-----------|--------------------------------|
| gist_save | <i>Save gist files to disk</i> |
|-----------|--------------------------------|

Description

Save gist files to disk

Usage

```

gist_save(gist, path = ".")

gist_open(x)

```

Arguments

| | |
|------|--|
| gist | A gist object or something coerceable to a gist |
| path | Root path to write to, a directory, not a file b/c a gist can contain many files. A folder is created with name of the gist id within this root directory. File names will be the same as given in the gist. |
| x | An object of class gist_files (the output from gist_save) |

Details

gist_save: files are written into a new folder, named by the gist id, e.g., a65ac7e56b7b3f746913
 gist_open: opens files in your editor/R GUI. Internally, uses `file.edit` to open files, using `getOption("editor")` to open the files. If you're in R.app or RStudio, or other IDE's, files will open in the IDE (I think).

Value

An object of class gist_files, S3 object containing file paths

Examples

```
## Not run:
gist("a65ac7e56b7b3f746913") %>% gist_save()
gist("a65ac7e56b7b3f746913") %>% gist_save() %>% gist_open()
gist("https://gist.github.com/expersso/4ac33b9c00751fddc7f8") %>% gist_save()

## End(Not run)
```

| | |
|------------|-----------------------------------|
| rate_limit | <i>Get rate limit information</i> |
|------------|-----------------------------------|

Description

Get rate limit information

Usage

```
rate_limit(...)
```

Arguments

... Named args to `GET`

Examples

```
## Not run:
rate_limit()
rate_limit(config=verbose())

## End(Not run)
```

| | |
|-----|------------------------|
| run | <i>Run a .Rmd file</i> |
|-----|------------------------|

Description

Run a .Rmd file

Usage

```
run(x, filename = "code.R", knitopts = list())
```

Arguments

| | |
|----------|---|
| x | Input, one of: code wrapped in curly brackets and quotes, a file path to an .Rmd file, or a gist. |
| filename | Name of the file to create, only used if code parameter is used. Default to code.R |
| knitopts | (list) List of variables passed on to link[knitr]{knit} |

Value

A path, unless a gist object is passed in, in which case a gist object is returned.

Examples

```
## Not run:
# run a local file
file <- system.file("examples", "stuff.Rmd", package = "gistr")
run(file) %>% gist_create

# run code
run({'
  ``{r}
  x <- letters
  (numbers <- runif(8))
  ``
'}) %>% gist_create

# run a file from a gist, has to get file first
gists('minepublic')[[2]] %>% run() %>% update()

## End(Not run)
```

| | |
|------|--------------------|
| star | <i>Star a gist</i> |
|------|--------------------|

Description

Star a gist

Usage

```
star(gist, ...)
```

```
unstar(gist, ...)
```

```
star_check(gist, ...)
```

Arguments

| | |
|------|--|
| gist | A gist object or something that can be coerced to a gist object. |
| ... | Curl options passed on to GET |

Value

A message, and a gist object, the same one input to the function.

Examples

```
## Not run:
id <- '7ddb9810fc99c84c65ec'
gist(id) %>% star()
gist(id) %>% star_check()
gist(id) %>% unstar()
gist(id) %>% unstar() %>% star()
gist(id) %>% star_check()
gist(id) %>%
  star() %>%
  star_check()

# pass in a url
x <- "https://gist.github.com/expersso/4ac33b9c00751fddc7f8"
gist(x) %>% star
gist(x) %>% unstar

## End(Not run)
```

| | |
|-----|---|
| tbl | <i>Make a table from gist or commit class or a list of either</i> |
|-----|---|

Description

Make a table from gist or commit class or a list of either

Usage

```
tbl(x, ...)
```

Arguments

| | |
|-----|--|
| x | Either a gist or commit class object or a list of either |
| ... | Ignored |

Examples

```
## Not run:
x <- as.gist('f1403260eb92f5dfa7e1')
tbl(x)

# from a list
ss <- gists('minepublic')
tbl(ss[1:3])
## manipulate with dplyr
library("dplyr")
tbl(gists("minepublic")[1:10]) %>%
  select(id, description, owner_login) %>%
  filter(grepl("gist gist gist", description))

# commits
x <- gists()[[2]] %>% commits()
tbl(x[[1]])

## many
x <- sapply(c(gists(), gists()), commits)
tbl(x) %>%
  select(id, login, change_status.total, url) %>%
  filter(change_status.total > 50)

# pass in a url
gist("https://gist.github.com/expersso/4ac33b9c00751fddc7f8") %>% tbl
## many
gg <- gists()
(urls <- vapply(gg, "[[", "", "html_url"))
lapply(urls[1:5], as.gist) %>% tbl()

## End(Not run)
```

| | |
|--------|-----------------------------|
| update | <i>Update/modify a gist</i> |
|--------|-----------------------------|

Description

Update/modify a gist

Usage

```
update(gist, description = gist$description, ...)
```

Arguments

| | |
|-------------|--|
| gist | A gist object or something coerceable to a gist |
| description | (character) Brief description of gist (optional) |
| ... | Curl options passed on to GET |

Examples

```
## Not run:
file1 <- system.file("examples", "alm.md", package = "gistr")
file2 <- system.file("examples", "zoo.json", package = "gistr")

# add new files
gists(what = "minepublic")[[3]] %>%
  add_files(file1, file2) %>%
  update()

# update existing files
### file name has to match to current name
gists(what = "minepublic")[[3]] %>%
  update_files(file1) %>%
  update()

# delete existing files
### again, file name has to match to current name
gists(what = "minepublic")[[3]] %>%
  delete_files(file1, file2) %>%
  update()

# rename existing files
# For some reason, this operation has to upload the content too
### first name is old file name with path (must match), and second is new file name (w/o path)
## add first
gists(what = "minepublic")[[3]] %>%
  add_files(file1, file2) %>%
  update()
## then rename
gists(what = "minepublic")[[3]] %>%
```

```
rename_files(list(file1, "newfile.md")) %>%  
update()  
### you can pass in many renames  
gists(what = "minepublic")[[3]] %>%  
  rename_files(list(file1, "what.md"), list(file2, "new.json")) %>%  
  update()  
  
## End(Not run)
```

Index

*Topic **package**

gistr-package, 2

add_files, 3

as.gist (gist), 7

browse, 3

commits, 4

delete, 4

delete_files (add_files), 3

embed, 5

file.edit, 15

fork, 5

forks, 6

GET, 3–8, 15, 17, 19

gist, 7

gist_auth, 9

gist_create, 10, 13, 14

gist_create_obj, 11, 12, 14

gist_map, 14

gist_open (gist_save), 14

gist_save, 14

gistr (gistr-package), 2

gistr-package, 2

gists, 8

imgur_upload, 10

knit, 10

oauth_app, 9

rate_limit, 15

rename_files (add_files), 3

render, 10

run, 16

star, 17

star_check (star), 17

tabl, 18

unstar (star), 17

update, 19

update_files (add_files), 3