

Package ‘rfigshare’

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Title An R Interface to 'figshare'

Description An interface to 'figshare' (<http://figshare.com>), a scientific repository to archive and assign 'DOIs' to data, software, figures, and more.

Version 0.3.7

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

BugReports <https://github.com/ropensci/rfigshare/issues>

Suggests testthat, gdata, uuid

Depends R (>= 3.0), methods

Imports RJSONIO, httr (>= 0.3), httpuv, plyr, yaml, ggplot2, XML

NeedsCompilation no

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fs_add_authors	<i>Add author to an article</i>
----------------	---------------------------------

Description

Add author to an article

Usage

```
fs_add_authors(article_id, authors, session = fs_get_auth(),
  create_missing = TRUE, debug = FALSE)
```

Arguments

article_id	id number of an article on figshare
authors	a list or character string of authors or author id numbers (or mixed).
session	(optional) the authentication credentials from <code>fs_auth</code> . If not provided, will attempt to load from cache as long as <code>figshare_auth</code> has been run.
create_missing	(logical) Attempt to create authors not already registered on FigShare?
debug	return the httr result visibly?

Value

adds the requested authors to the given article

Author(s)

Carl Boettiger <cboettig@gmail.com>

Examples

```
## Not run:
fs_add_authors("138", list("Scott Chamberlain", "Karthik Ram"))
fs_add_authors("138", c("Scott Chamberlain", "Karthik Ram"))
fs_add_authors("138", list("Scott Chamberlain", "97306"))
fs_add_authors("138", list("Scott Chamberlain", 97306))
fs_add_authors(138, 97306)

## End(Not run)
```

fs_add_categories	<i>Add a category to article</i>
-------------------	----------------------------------

Description

Add a category to article

Usage

```
fs_add_categories(article_id, category_id, session = fs_get_auth(),
  debug = FALSE)
```

Arguments

article_id	the id number of the article
category_id	is a vector of integers corresponding to categories or a vector of category names
session	(optional) the authentication credentials from fs_auth . If not provided, will attempt to load from cache as long as figshare_auth has been run.
debug	return PUT results visibly?

Value

output of PUT request (invisibly)

Author(s)

Edmund Hart <edmund.m.hart@gmail.com>

References

<http://api.figshare.com>

See Also

[fs_auth](#)

Examples

```
## Not run:  
fs_add_categories(138, "Ecology")  
  
## End(Not run)
```

fs_add_links	<i>Add link to article</i>
--------------	----------------------------

Description

Adds url links to the metadata of an article

Usage

```
fs_add_links(article_id, link, session = fs_get_auth(), debug = FALSE)
```

Arguments

article_id	the id number of the article
link	the url you wish to add (can be list of urls)
session	(optional) the authentication credentials from fs_auth . If not provided, will attempt to load from cache as long as authentication has been run.
debug	logical, should function return details of PUT request?

Value

output of PUT request (invisibly)

Author(s)

Carl Boettiger <cboettig@gmail.com>

References

<http://api.figshare.com>

See Also

[fs_auth](#)

Examples

```
## Not run:  
fs_add_links(138, list("http://carlboettiger.info", "http://ropensci.org"))  
  
## End(Not run)
```

fs_auth	<i>Figshare authentication via OAuth1.0 using htrr</i>
---------	--

Description

Figshare authentication via OAuth1.0 using htrr

Usage

```
fs_auth(cKey = getOption("FigshareKey", NULL),
        cSecret = getOption("FigsharePrivateKey", NULL),
        token = getOption("FigshareToken", NULL),
        token_secret = getOption("FigsharePrivateToken", NULL))
```

Arguments

cKey	optional argument for the consumer key. See details.
cSecret	optional argument for the consumer secret key. See details.
token	optional argument for the user-specific token. See details.
token_secret	Optional argument to provide a secret token assigned to the user, rather than let fs_auth() automatically handle authentication. See details.

Details

Explicit calls to fs_auth() are usually not needed, as the function is called automatically by all other functions that need authentication. As of version 0.3, no arguments are needed as authentication is done online, and fs_auth() will not attempt to load keys stored in options.

By default, the function will use the application's consumer key and consumer secret key, rather than expecting the user to create their own application. The user-specific tokens will then be generated and locally cached for use between sessions, if indicated by the interactive options. For details, see htrr oauth1.0_token documentation.

If for some reason a user would rather provide their token and secret token as before this is still supported using the same arguments. Users wanting to have their own app can provide cKey and cSecret arguments too, but this is provided primarily for backwards compatibility with older versions. It is expected that most users will leave the keys as NULL.

Value

OAuth credential (invisibly). The credential is also written to the environment "FigshareAuth-Cache", which is created when the package is loaded. All functions needing authentication can then access the credential without it being explicitly passed in the function call. If authentication fails, returns the failing GET response for debugging.

Author(s)

Carl Boettiger <cboettig@gmail.com>

References

<http://api.figshare.com>

Examples

```
## Not run:  
fs_auth()  
  
## End(Not run)
```

fs_author_search	<i>Search for an author</i>
------------------	-----------------------------

Description

Function to search for authors

Usage

```
fs_author_search(author, session = fs_get_auth(), debug = FALSE)
```

Arguments

author	a string to search for (name, can include spaces)
session	(optional) the authentication credentials from fs_auth . If not provided, will attempt to load from cache as long as figshare_auth has been run.
debug	toggle debugging mode

Value

output of PUT request (invisibly)

Author(s)

Carl Boettiger <cboettig@gmail.com>

References

<http://api.figshare.com>

See Also

[fs_auth](#)

Examples

```
## Not run:
fs_author_search("Boettiger")

## End(Not run)
```

fs_browse	<i>Browse articles</i>
-----------	------------------------

Description

Browse can be set to all public articles, the users own articles, Browse can filter on matching times-tamp, author, title, description, tag, category, and date range.

Usage

```
fs_browse(mine = TRUE, public_only = FALSE, private_only = FALSE,
  drafts_only = FALSE, session = fs_get_auth(),
  base = "http://api.figshare.com/v1", query = NA, debug = FALSE)
```

Arguments

mine	Logical, show only my (authenticated user's) articles. Defaults to TRUE.
public_only	(for use with mine=TRUE only) browse only my public articles. default is FALSE
private_only	(for use with mine=TRUE only) browse only my private articles. default is FALSE
drafts_only	(for use with mine=TRUE only) browse only my draft articles. default is FALSE
session	(optional) the authentication credentials from fs_auth . If not provided, will attempt to load from cache as long as figshare_auth has been run.
base	the API access url
query	a search query term (equivalent to calling fs_search)
debug	enable debugging mode

Value

output of PUT request (invisibly)

Author(s)

Carl Boettiger <cboettig@gmail.com>

References

<http://api.figshare.com/docs/howto.html#q-search>

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

```
## Not run:  
fs_browse()  
  
## End(Not run)
```

fs_category_list	<i>List all categories</i>
------------------	----------------------------

Description

List all categories

Usage

```
fs_category_list(debug = FALSE)
```

Arguments

debug enable debugging

Value

a table of all the categories

References

<http://api.figshare.com>

Examples

```
## Not run:  
fs_categories_list()  
  
## End(Not run)
```

fs_cat_to_id	<i>Helper function that matches string categories to id's</i>
--------------	---

Description

Helper function that matches string categories to id's

Usage

```
fs_cat_to_id(category_id)
```

Arguments

category_id Must be a valid category string, regardless of case

Value

a vector of integers corresponding to valid figshare categories

Author(s)

Edmund Hart <edmund.m.hart@gmail.com>

References

<http://api.figshare.com>

fs_create	<i>Create a FigShare article (draft)</i>
-----------	--

Description

Articles must be created with `fs_create` with essential metadata. Then you can add files with `fs_upload`, add categories, tags or authors with `fs_add_categories` or `fs_add_tags` `fs_add_authors`. Authors not registered with a FigShare id can be created with `fs_create_author`. You can edit the original metadata with `fs_update`. Finally, release the article as either private or public with `fs_make_private` or `fs_make_public`. Before creating the article, you must authenticate using `fs_auth`.

Usage

```
fs_create(title, description, type = c("dataset", "figure", "media", "poster",  
  "paper", "fileset"), session = fs_get_auth(), debug = FALSE)
```

Arguments

title	for the article
description	of the article
type	one of: dataset, figure, media, poster, paper or fileset. (Only filesets can have multiple uploaded files attached).
session	the authentication credentials from fs_auth
debug	print full post call return

Value

article id

References

<http://api.figshare.com>

See Also

[fs_auth](#), [fs_upload](#)

Examples

```
## Not run:  
fs_create("My Title", "A description of the object", "dataset")  
  
## End(Not run)
```

fs_create_author	<i>Creates a figshare author</i>
------------------	----------------------------------

Description

Creates a figshare author

Usage

```
fs_create_author(full_name, session = fs_get_auth(), debug = FALSE)
```

Arguments

full_name	full name of the author to create
session	(optional) the authentication credentials from fs_auth . If not provided, will attempt to load from cache as long as figshare_auth has been run.
debug	return PUT request visibly?

Value

author ID numbers

Author(s)

Carl Boettiger <cboettig@gmail.com>

References

<http://api.figshare.com>

See Also

[fs_auth](#)

Examples

```
## Not run:  
fs_create_author("Benjamin Franklin")  
  
## End(Not run)
```

fs_delete

Delete article (private or drafts only) or attached file

Description

Delete article (private or drafts only) or attached file

Usage

```
fs_delete(article_id, file_id = NULL, session = fs_get_auth(),  
          debug = FALSE)
```

Arguments

article_id	the id number of the article
file_id	the id number of the file, if removing an attached file from a fileset. file_id defaults to NULL, removing the entire draft or private article.
session	(optional) the authentication credentials from fs_auth . If not provided, will attempt to load from cache as long as figshare_auth has been run.
debug	display return value of request?

Value

output of DELETE request (invisibly)

Author(s)

Carl Boettiger <cboettig@gmail.com>

References

<http://api.figshare.com>

See Also

[fs_auth](#)

Examples

```
## Not run:
fs_delete(123)

## Delete all attachments in the second-most-recent entry in my library
my_lib <- fs_browse(mine=TRUE)
article_id <- my_lib[[2]]$article_id
file_ids <- sapply(my_lib[[2]]$files, `[[`, "id")
sapply(file_ids, function(id) fs_delete(article_id, id))

## End(Not run)
```

fs_details

Get details for an article

Description

Get details for an article

Usage

```
fs_details(article_id, mine = is_mine(article_id), session = fs_get_auth(),
  show_versions = FALSE, version = NULL, debug = FALSE)
```

Arguments

article_id	number
mine	logical (default FALSE). Set to true to see article details for your own non-public articles
session	the authentication credentials from fs_auth
show_versions	logical, show what versions are available
version	show a given version number
debug	logical, enable debugging mode?

Author(s)

Carl Boettiger <cboettig@gmail.com>

References

<http://api.figshare.com>

See Also

[fs_auth](#)

Examples

```
## Not run:  
fs_details(138)  
  
## End(Not run)
```

fs_download	<i>Get details for an article</i>
-------------	-----------------------------------

Description

Get details for an article

Usage

```
fs_download(article_id, urls_only = TRUE, mine = is_mine(article_id),  
            session = fs_get_auth(), show_versions = FALSE, version = NULL, ...)
```

Arguments

article_id	number
urls_only	logical (default TRUE) to only return the URLs to the downloadable objects but do not call download.file. If FALSE, will download files
mine	logical (default FALSE). Set to true to see article details for your own non-public articles
session	the authentication credentials from fs_auth
show_versions	logical, show what versions are available
version	show a given version number
...	additional arguments to download.file

Author(s)

Carl Boettiger <cboettig@gmail.com>

References

<http://api.figshare.com> <https://github.com/ropensci/rfigshare>

See Also

[fs_auth](#) [download.file](#)

Examples

```
## Not run:  
url <- fs_download(90818)  
data <- read.csv(url)  
articles <- fs_search("SciFund")  
ids <- fs_ids(articles)  
fs_download(ids, urls_only=FALSE)  
  
## End(Not run)
```

fs_embed

Upload a figure to figshare and return the url

Description

Upload a figure to figshare and return the url

Usage

```
fs_embed(file)
```

Arguments

file path to an image file

Details

use with `opts_knit$set(upload.fn = fs_embed)`

Value

a url to the image file

`fs_ids`*Get a list of article id numbers from a search return*

Description

Get a list of article id numbers from a search return

Usage

```
fs_ids(object)
```

Arguments

`object` the output of a search

Value

a list of article id numbers

Author(s)

Carl Boettiger <cboettig@gmail.com>

References

<http://api.figshare.com>

Examples

```
## Not run:  
figshare_category()  
  
## End(Not run)
```

`fs_image_url`*get image url*

Description

get image url

Usage

```
fs_image_url(id, debug = FALSE)
```

Arguments

id a (public) figshare figure id number
debug logical, enable debugging mode?

Details

this is currently an unstable hack of html parsing

Value

a url to the image file

fs_make_private *Make an article private (draft only?)*

Description

Make an article private (draft only?)

Usage

```
fs_make_private(article_id, session = fs_get_auth())
```

Arguments

article_id the id number of the article
session (optional) the authentication credentials from [fs_auth](#). If not provided, will attempt to load from cache as long as [fs_auth](#) has been run.

Value

output of PUT request (invisibly)

Author(s)

Carl Boettiger <cboettig@gmail.com>

References

<http://api.figshare.com>

See Also

[fs_auth](#)

Examples

```
## Not run:  
fs_make_private(123)  
  
## End(Not run)
```

fs_make_public	<i>Make an article public (for private or draft articles)</i>
----------------	---

Description

Make an article public (for private or draft articles)

Usage

```
fs_make_public(article_id, session = fs_get_auth())
```

Arguments

article_id	the id number of the article
session	(optional) the authentication credentials from fs_auth .

Details

NOTE: Public articles are assigned DOIs and cannot be deleted or made private once declared public! Public articles do not count against your quota space.

Value

output of PUT request (invisibly)

Author(s)

Carl Boettiger <cboettig@gmail.com>

References

<http://api.figshare.com>

See Also

[fs_auth](#)

Examples

```
## Not run:  
fs_make_public(123)  
  
## End(Not run)
```

fs_new_article	<i>Create a FigShare article.</i>
----------------	-----------------------------------

Description

fs_new_article is a wrapper around many other rfigshare commands to provide convenient posting.

Usage

```
fs_new_article(title, description, type = c("dataset", "figure", "media",
  "poster", "paper", "fileset"), authors = NA, categories = NA, tags = NA,
  links = NA, files = NA, visibility = c("draft", "private", "public"),
  session = fs_get_auth())
```

Arguments

title	for the article, see fs_create for details.
description	of the article, see fs_create for details.
type	one of: dataset, figure, media, poster, or paper, see fs_create for details.
authors	Ordered list of authors for the article, see fs_add_authors for details
categories	list of categories or category id numbers, see fs_add_categories for details.
tags	list of tags, see fs_add_tags for details.
links	list of links to add, see fs_add_links for details
files	path to the files to add, see fs_upload for details
visibility	one of "draft", "private" or "public". A draft document can still be edited and modified. A public document is visible to everyone and cannot be deleted (though additional authors to the work can still "claim" their authorship).
session	(optional) credentials, see <code>link{fs_auth}</code>

Value

article id

References

<http://api.figshare.com>

See Also

[fs_auth](#), [fs_add_categories](#), [fs_add_authors](#), [fs_add_tags](#), [fs_add_links](#)

Examples

```
## Not run:
write.csv(mtcars, "mtcars.csv")
id <- fs_new_article(title="A Test of rfigshare",
                    description="This is a test of the fs_new_article function and related methods",
                    type="dataset",
                    authors=c("Karthik Ram", "Scott Chamberlain"),
                    tags=c("ecology", "openscience"),
                    categories="Ecology",
                    links="http://ropensci.org",
                    files="mtcars.csv",
                    visibility="private")

## End(Not run)
```

fs_search

Advanced Search.

Description

Search function that will filter on matching timestamp, author, title, description, tag, category, and date range. Query searches against matches in any metadata field. Full-text searches coming soon.

Usage

```
fs_search(query, author = NA, title = NA, description = NA, tag = NA,
          category = NA, from_date = NA, to_date = NA, mine = FALSE,
          public_only = FALSE, private_only = FALSE, drafts_only = FALSE,
          session = fs_get_auth(), base = "http://api.figshare.com/v1",
          debug = FALSE)
```

Arguments

query	the search query
author	Show only results by this author
title	Show only results matching or partially matching this title
description	Show only results matching or partially matching this description
tag	Show only results matching this tag
category	Show only results matching this category
from_date	Start time window for search. Date format is YYYY-MM-DD
to_date	Ending time window for search. Date format is YYYY-MM-DD
mine	Browse only articles owned by user. default is FALSE. Not functional. Use fs_browse instead.
public_only	(for use with mine=TRUE only) browse only my public articles. default is FALSE

private_only	(for use with mine=TRUE only) browse only my private articles. default is FALSE
drafts_only	(for use with mine=TRUE only) browse only my draft articles. default is FALSE
session	(optional) the authentication credentials from fs_auth . If not provided, will attempt to load from cache as long as figshare_auth has been run.
base	the API access url
debug	logical, enable debugging mode

Value

output of PUT request (invisibly)

Author(s)

Carl Boettiger <cboettig@gmail.com>

References

<http://api.figshare.com/docs/howto.html#q-search>

See Also

`\code{fs_auth}` `fs_browse`

Examples

```
## Not run:
fs_search("Boettiger")
fs_search("Boettiger", author = "Carl")
fs_search("Boettiger", author = "Carl", from="2014-01-01")
fs_search("Boettiger", author = "Carl", from="2014-01-01",
          category = "Evolutionary Biology")

## End(Not run)
```

fs_update	<i>Update article title, description, or type</i>
-----------	---

Description

Updates the article title, description or type. If any is not specified, it will remain unchanged.

Usage

```
fs_update(article_id, title = NA, description = NA, type = NA,
          mine = TRUE, session = fs_get_auth(), debug = FALSE)
```

Arguments

article_id	the id number of the article
title	for the article (to replace original title)
description	of the article (replaces original designation)
type	one of: dataset, figure, media, poster, or paper (replaces original designation)
mine	Set to TRUE if it refers to an item on your own account
session	(optional) the authentication credentials from fs_auth .
debug	return httr PUT request visibly?

Details

Updates the title, description, and type of an article.

Value

output of PUT request (invisibly)

Author(s)

Carl Boettiger <cboettig@gmail.com>

References

<http://api.figshare.com>

See Also

[fs_auth](#), [fs_add_tags](#)

Examples

```
## Not run:  
fs_update(138, title = "New title")  
  
## End(Not run)
```

fs_upload

Upload file to an article

Description

Upload file to an article

Usage

```
fs_upload(article_id, file, session = fs_get_auth())
```

Arguments

article_id	an article id number or a character string (or list) of numbers
file	path to file to upload, or character string (or list) of files (paths)
session	the authentication credentials from fs_auth (optional)

Details

Article must be a draft, i.e. created by [fs_create](#) and not yet made public or private. Only articles of type "fileset" can have multiple files uploaded.

Author(s)

Carl Boettiger <cboettig@gmail.com>

References

<http://api.figshare.com>

See Also

[fs_auth](#)

Examples

```
## Not run:  
id <- fs_create("Title", "description", "figure")  
fs_upload(id, "file.png")  
  
## End(Not run)
```

plot_to_filename *Convenience function to save a ggplot2 plot, and return its filename.*

Description

Convenience function to save a ggplot2 plot, and return its filename.

Usage

```
plot_to_filename(plotobj, filename, path = ".")
```

Arguments

plotobj	ggplot2 plot object (should add support for base plots too)
filename	Filename, don't include the file type extension.
path	Path where you want to save the file.

Value

A file name, to use in fs_upload

See Also

[fs_upload](#)

Examples

```
## Not run:
# include in your fs_upload call
library(ggplot2)
p <- qplot(mpg, wt, data=mtcars)
plott <- fs_create(title="my title", description="some description", type="figure")
fs_add_categories(plott, "Ecology")
fs_upload(plott, plot_to_filename(p, "myfilename", "~"))

## End(Not run)
```

summary_fs_details *Collect metadata from details call*

Description

Collect metadata from details call

Usage

```
summary_fs_details(fs_details_obj)
```

Arguments

fs_details_obj object

Author(s)

Edmund Hart <edmund.m.hart@gmail.com>

References

<http://api.figshare.com>

Examples

```
## Not run:
fs_auth()
my_article <- fs_details("138")
summary_fs_details(my_article)

## End(Not run)
```

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