

Package ‘BrownDog’

October 12, 2022

Type Package

Title Brown Dog R Interface

Version 0.2.1

Date 2017-10-06

Author Smruti Padhy, Rob Kooper, Yan Zhao

Maintainer Yan Zhao <yanzhao3@illinois.edu>

Description

An R interface for the Brown Dog which allows researchers to leverage Brown Dog Services that provides modules to identify the conversion options for a file, to convert file to appropriate format, or to extract data from a file. See <<http://browndog.ncsa.illinois.edu/>> for more information.

Imports RCurl, jsonlite, httpuv, utils

License FreeBSD | file LICENSE

Copyright Authors

LazyLoad yes

LazyData FALSE

RoxygenNote 5.0.1.9000

NeedsCompilation no

Repository CRAN

Date/Publication 2017-10-06 16:24:16 UTC

R topics documented:

convert_file	2
download	3
extract_file	3
get_key	4
get_output_formats	5
get_token	5

Index	7
--------------	----------

convert_file	<i>convert_file</i>
--------------	---------------------

Description

Convert a file using Brown Dog Conversion service

Usage

```
convert_file(url, input_file, output, output_path, token, wait = 60,
            download = TRUE)
```

Arguments

url	The URL to the Brown Dog Server to use
input_file	The input file, either local file with path, or file url
output	The output format extension
output_path	The path for the created output file. May contain different filename. note the path ends with '/'
token	Brown Dog access token
wait	The amount of time to wait for the DAP service to respond. Default is 60
download	The flag to download the result file. Default is true

Value

The output filename

Examples

```
## Not run:
key <- get_key("https://bd-api-dev.ncsa.illinois.edu", "your email", "password")
token <- get_token("https://bd-api-dev.ncsa.illinois.edu", key)
convert_file("https://bd-api-dev.ncsa.illinois.edu",
            "http://browndog.ncsa.illinois.edu/examples/gi/Dongying_sample.csv", "xlsx", "/",
            token)

## End(Not run)
```

download	<i>Download file from browndog</i>
----------	------------------------------------

Description

This will download a file, if a 404 is returned it will wait until the file is available. If the file is still not available after timeout tries, it will return NA. If the file is downloaded it will return the name of the file

Usage

```
download(url, file, token, timeout = 60)
```

Arguments

url	the url of the file to download
file	the filename
token	Brown Dog access token
timeout	timeout number of seconds to wait for file (default 60)

Value

the name of file if successfull or NA if not.

Examples

```
## Not run:  
key <- get_key("https://bd-api-dev.ncsa.illinois.edu", "your email", "password")  
token <- get_token("https://bd-api-dev.ncsa.illinois.edu", key)  
download("https://bd-api-dev.ncsa.illinois.edu", "vdc.csv", token)  
  
## End(Not run)
```

extract_file	<i>Extract file</i>
--------------	---------------------

Description

Extract content-based metadata from the given input file's content using Brown Dog extraction service

Usage

```
extract_file(url, file, token, wait = 60)
```

Arguments

url	The URL to the Brown Dog server to use.
file	The input file could be URL or file with the path
token	Brown Dog access token
wait	The amount of time to wait for the DTS to respond. Default is 60 seconds

Value

The extracted metadata in JSON format

Examples

```
## Not run:
key <- get_key("https://bd-api-dev.ncsa.illinois.edu", "your email", "password")
token <- get_token("https://bd-api-dev.ncsa.illinois.edu", key)
extract_file("https://bd-api-dev.ncsa.illinois.edu",
"http://browndog.ncsa.illinois.edu/examples/gi/Dongying_sample.csv", token)

## End(Not run)
```

get_key

Get Key

Description

Get a key from the BD API gateway to access BD services

Usage

```
get_key(url, username, password)
```

Arguments

url	URL of the BD API gateway
username	user name for BrownDog
password	password for BrownDog

Value

BD API key

Examples

```
## Not run:
get_key("https://bd-api-dev.ncsa.illinois.edu", "your email", "password")

## End(Not run)
```

get_output_formats *Get input format.*

Description

Check Brown Dog Service for available output formats for the given input format.

Usage

```
get_output_formats(url, inputformat, token)
```

Arguments

url	The URL to the Brown Dog server to use.
inputformat	The format of the input file.
token	Brown Dog access token

Value

: A string array of reachable output format extensions.

Examples

```
## Not run:
key <- get_key("https://bd-api-dev.ncsa.illinois.edu", "your email", "password")
token <- get_token("https://bd-api-dev.ncsa.illinois.edu", key)
get_output_formats("https://bd-api-dev.ncsa.illinois.edu", "csv",
token)

## End(Not run)
```

get_token *Get Token*

Description

Get a Token from the BD API gateway to access BD services

Usage

```
get_token(url, key)
```

Arguments

url	URL of the BD API gateway
key	permanet key for BD API

Value

BD API Token

Examples

```
## Not run:  
key <- get_key("https://bd-api-dev.ncsa.illinois.edu", "your email", "password")  
get_token("https://bd-api-dev.ncsa.illinois.edu", key)  
  
## End(Not run)
```

Index

`convert_file`, 2

`download`, 3

`extract_file`, 3

`get_key`, 4

`get_output_formats`, 5

`get_token`, 5