

# Package ‘BrownDog’

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**Type** Package

**Title** Brown Dog R Interface

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## 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

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**LazyData** FALSE

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convert_file	<i>convert_file</i>
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### 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)
```

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download	<i>Download file from browndog</i>
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**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)
```

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extract_file	<i>Extract file</i>
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**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)
```

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get\_key

*Get Key*


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**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.*

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**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)
```

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get\_token                      *Get Token*

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**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)
```

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