

# Package ‘citation’

March 30, 2023

**Type** Package

**Title** Software Citation Tools

**Version** 0.8.2

**Date** 2023-03-30

**Description** A collection of functions to extract citation information from 'R' packages and to deal with files in 'citation file format' (<<https://citation-file-format.github.io/>>), extending the functionality already provided by the citation() function in the 'utils' package.

**Imports** desc, jsonlite, utils, withr, yaml

**Suggests** covr, testthat

**URL** <https://github.com/pik-piam/citation>,  
<https://doi.org/10.5281/zenodo.3813429>

**BugReports** <https://github.com/pik-piam/citation/issues>

**License** BSD\_2\_clause + file LICENSE

**Encoding** UTF-8

**RoxygenNote** 7.2.3

**NeedsCompilation** no

**Author** Jan Philipp Dietrich [aut, cre],  
Waldir Leoncio [aut]

**Maintainer** Jan Philipp Dietrich <dietrich@pik-potsdam.de>

**Repository** CRAN

**Date/Publication** 2023-03-30 18:30:02 UTC

## R topics documented:

citation-package . . . . .	2
cff2bibentry . . . . .	2
cff2md . . . . .	3
cff2r . . . . .	3

cff2zenodo . . . . .	5
cffReport . . . . .	5
citation2zenodo . . . . .	6
citation_doi . . . . .	7
package2zenodo . . . . .	7
r2cff . . . . .	8
read_cff . . . . .	9
scanRepos . . . . .	10

<b>Index</b>	<b>11</b>
--------------	-----------

---

citation-package	<i>citation: Software Citation Tools</i>
------------------	--

---

## Description

A collection of functions to extract citation information from 'R' packages and to deal with files in 'citation file format' (<https://citation-file-format.github.io/>), extending the functionality already provided by the citation() function in the 'utils' package.

## Author(s)

**Maintainer:** Jan Philipp Dietrich <dietrich@pik-potsdam.de>

Authors:

- Waldir Leoncio <w.l.netto@medisin.uio.no>

## See Also

Useful links:

- <https://github.com/pik-piam/citation>
- doi: [10.5281/zenodo.3813429](https://doi.org/10.5281/zenodo.3813429)
- Report bugs at <https://github.com/pik-piam/citation/issues>

---

cff2bibentry	<i>cff2bibentry</i>
--------------	---------------------

---

## Description

Converter citation file format to bibentry

## Usage

cff2bibentry(x)

**Arguments**

x path to citation file or read in citation in citation file format

**Author(s)**

Jan Philipp Dietrich

---

cffi2md	<i>cffi2md</i>
---------	----------------

---

**Description**

Creates a summary of the CFF content in markdown format. This can be useful for instance to create software reports.

**Usage**

cffi2md(x)

**Arguments**

x path to citation file or read in citation in citation file format

**Author(s)**

Jan Philipp Dietrich

---

cffi2r	<i>Convert from CFF into R</i>
--------	--------------------------------

---

**Description**

Converts a CFF file into DESCRIPTION

**Usage**

```
cffi2r(cffiFile = "CITATION.cff", export = FALSE, ...)
```

**Arguments**

cffiFile	Path and name of the CFF file
export	if 'TRUE', the output is saved as DESCRIPTION (plus an extension to avoid overwriting)
...	when export = TRUE, the user can pass additional arguments to the exportDESCRIPTION function. More information in the Details section.

## Details

CFF is a standard format for the citation of software proposed by Stephan Druskat et. al. (see references below). CFF-compliant files are stored in files named CITATION.cff.

CITATION.cff files are plain text files with human- and machine-readable citation information for software. Code developers can include them in their repositories to let others know how to correctly cite their software.

When `export = TRUE`, the user can use the following arguments to customize the output file:

**outname** The name of the exported file

**overwrite** Defaults to FALSE. If TRUE, will replace any homonymous file present on the export path

**outpath** By default, the file is saved to a temporary directory. One may provide a different path here. For example, `outpath = "."` will save to the current working directory

## Value

A CFF file converted to a DESCRIPTION file.

## Author(s)

Waldir Leoncio

## References

Druskat S., Spaaks J.H., Chue Hong N., Haines R., Baker J. (2019). Citation File Format (CFF) (version 1.1.0). DOI: <http://doi.org/10.5281/zenodo.1003149>

<https://www.software.ac.uk/blog/2017-12-12-standard-format-citation-files> <https://citation-file-format.github.io>  
<https://github.com/citation-file-format/citation-file-format/blob/master/README.md> <https://citation-file-format.github.io/cff-initializer-javascript/>

## See Also

r2cff

## Examples

```
## Not run:
# Printing converted file onto R session
citation_file <- system.file("CFF-CITATION.cff", package = "citation")
cff2r(citation_file)

# Saving converted file to temporary folder on system
tempFolder <- tempdir()
cff2r(
  citation_file, export = TRUE, outname = "converted-desc", overwrite = TRUE,
  outpath = tempFolder
)

# Making sure the file is indeed there
cat(readLines(file.path(tempFolder, "converted-desc")), sep="\n")
```

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

---

```
cfl2zenodo
```

```
cfl2zenodo
```

---

### Description

Converter citation file format to .zenodo.json metadata file for proper metadata input to Zenodo.

### Usage

```
cfl2zenodo(x)
```

### Arguments

x	path to citation file or read in citation in citation file format. If a path is provided the .zenodo.json information will be written directly to a .zenodo.json file in the corresponding folder. Otherwise the metadata will be just returned by the function.
---	--

### Value

The metadata information that should be provided to Zenodo in JSON format.

### Author(s)

Jan Philipp Dietrich

---

```
cflReport
```

```
cflReport
```

---

### Description

Creates a report in markdown format for a provided list of repositories and or CITATION.cff files.

### Usage

```
cflReport(repos, file = NULL, sortBy = "title")
```

### Arguments

repos	character vector of repository urls or links to CITATION.cff files to be scanned
file	character string naming a file the report should be written to. If NULL the report will be directly returned by the function.
sortBy	category by which the report should sort its entries

**Value**

the report in markdown format

**Author(s)**

Jan Philipp Dietrich

---

citation2zenodo	<i>citation2zenodo</i>
-----------------	------------------------

---

**Description**

Converts an object of class `citation` into a `.zenodo.json` file. This file is an (officially unsupported) method to provide ZENODO with metadata information about the package and will overwrite the information ZENODO would otherwise auto-generate from the repository.

**Usage**

```
citation2zenodo(cit, folder = NULL)
```

**Arguments**

<code>cit</code>	an object of class <code>citation</code> as returned for instance by the function <code>citation</code> , or the name of a R package to be used as source.
<code>folder</code>	a folder the file should be written to. If <code>NULL</code> the content is instead printed.

**Author(s)**

Jan Philipp Dietrich

**Examples**

```
cit <- citation_doi("citation")
citation2zenodo(cit)
```

---

citation_doi	<i>citation_doi</i>
--------------	---------------------

---

**Description**

Extension of the standard citation function which also extracts DOI information from the URL field in the DESCRIPTION file, if available.

**Usage**

```
citation_doi(package)
```

**Arguments**

package            a character string with the name of a single package.

**Author(s)**

Jan Philipp Dietrich

**Examples**

```
citation_doi("citation")
```

---

package2zenodo	<i>package2zenodo</i>
----------------	-----------------------

---

**Description**

Creates a .zenodo.json for a R package. This file is an (officially unsupported) method to provide ZENODO with metadata information about the package and will overwrite the information ZENODO would otherwise auto-generate from the repository.

**Usage**

```
package2zenodo(package = ".")
```

**Arguments**

package            either the path to the main folder of a package (containing a DESCRIPTION file) or the name of the package. If a path is provided the .zenodo.json file will be directly added to the folder. Otherwise the content of such a file is just returned.

**Value**

The metadata information that should be provided to Zenodo in JSON format.

**Author(s)**

Jan Philipp Dietrich

**Examples**

```
package2zenodo("citation")
```

---

r2cff

*Convert from R DESCRIPTION into CFF*

---

**Description**

Converts an R package DESCRIPTION file to Citation File Format

**Usage**

```
r2cff(descriptionFile = "DESCRIPTION", export = FALSE)
```

**Arguments**

descriptionFile

either the path to a DESCRIPTION file, the path to a main folder of a package (containing a DESCRIPTION file) or the name of a package.

export

if 'TRUE', the output is saved as CITATION.cff in the folder of the DESCRIPTION file.

**Details**

CFF is a standard format for the citation of software proposed by Stephan Druskat et. al. (see references below). CFF-compliant files are stored in files named CITATION.cff.

CITATION.cff files are plain text files with human- and machine-readable citation information for software. Code developers can include them in their repositories to let others know how to correctly cite their software.

**Value**

The package's DESCRIPTION file converted to CFF

**Author(s)**

Waldir Leoncio, Jan Philipp Dietrich



## References

Druskat S., Spaaks J.H., Chue Hong N., Haines R., Baker J. (2019). Citation File Format (CFF) (version 1.1.0). DOI: <http://doi.org/10.5281/zenodo.1003149>

<https://www.software.ac.uk/blog/2017-12-12-standard-format-citation-files> <https://citation-file-format.github.io>  
<https://github.com/citation-file-format/citation-file-format/blob/master/README.md> <https://citation-file-format.github.io/cff-initializer-javascript/>

## See Also

`cff2r`

## Examples

```
r2cff("citation")
```

---

`read_cff`

*read\_cff*

---

## Description

Read a citation file format file (<https://citation-file-format.github.io/>)

## Usage

```
read_cff(file)
```

## Arguments

`file` path to the citation file

## Author(s)

Jan Philipp Dietrich

---

scanRepos

*scan repositories*

---

**Description**

Scan repositories for existing CITATION.cff information

**Usage**

```
scanRepos(repos)
```

**Arguments**

repos            character vector of repository urls or links to CITATION.cff files to be scanned

**Value**

A list with CITATION.cff information collected from the provided repositories

**Author(s)**

Jan Philipp Dietrich

**See Also**

read\_cff

**Examples**

```
scanRepos(c("https://github.com/magpiemodel/magpie",  
          "https://github.com/remindmodel/remind"))
```

# Index

cff2bibentry, [2](#)  
cff2md, [3](#)  
cff2r, [3](#)  
cff2zenodo, [5](#)  
cffReport, [5](#)  
citation, [6](#)  
citation (citation-package), [2](#)  
citation-package, [2](#)  
citation2zenodo, [6](#)  
citation\_doi, [7](#)  
  
package2zenodo, [7](#)  
  
r2cff, [8](#)  
read\_cff, [9](#)  
  
scanRepos, [10](#)