Package: refR (via r-universe)

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Title An R package to get and manage BibTeX/YAML/JSON references

Version 1.0

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Description The package \textbf{refR} retrieves author references from Scopus Search and Crossref APIs and returns references as BibTeX files (function \code{\link[refR]{getRefs}}). It also allows to convert BibTeX files in more readable formats (i.e. YAML and JSON) by calling the software pandoc-citeproc (functions \code{\link[refR]{getRefs}} and \code{\link[refR]{bib2yaml}}). Information in references files can be cleaned using the function \code{\link[refR]{cleanRefs}}. This function translates special characters (accented characters and other LaTeX tags) and also cleans author names (detection of particle in family names, removal of uppercase except for each first letter of family and given names, and shorten given name).

URL https://github.com/inSileco/refR

BugReports https://github.com/inSileco/refR/issues

Depends R (>= 3.4.0)

License GPL-3

SystemRequirements Pandoc and pandoc-citeproc

LazyData true

Imports yaml, rjson, rcrossref

Suggests knitr, rmarkdown

VignetteBuilder knitr

RoxygenNote 6.1.1

NeedsCompilation no

Config/pak/sysreqs make libicu-dev libxml2-dev libssl-dev zlib1g-dev

Repository https://insileco.r-universe.dev

RemoteUrl https://github.com/inSileco/refR

RemoteRef HEAD

RemoteSha cf8927c0469a106414b48d56b50b43bb574cb11b

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bib2yaml *Convert a BibTeX to a YAML file*

Description

This function converts one (or many) BibTeX into YAML format using the software pandoc and pandoc-citeproc (called with the R functionsystem()).

Usage

```
bib2yaml(data = NULL, file = NULL, path = ".", write = TRUE)
```

Arguments

data	A vector of collapsed BibTeX [strings] (i.e. each element of the vector/list is one single BibTeX)
file	A vector of BibTeX files to be converted
path	The path to the directory where YAML files will be written (ignored if write = FALSE)
write	A boolean indicating if YAML will be written

Details

User has to specify one of data or file otherwise the function will return an error.

Value

A list of YAML files (i.e. a tagged list). If write = TRUE YAML files are also written in the directory specified by the argument path.

See Also

getRefs

Examples

```
# Coming soon...
```

`cleanRefs` *Clean references.*

Description

Remove LaTeX tags and shorten authors names in YAML references

Usage

```
cleanRefs(files)
```

Arguments

`files`	Filename(s) of references in the YAML format to be cleaned

Details

The conversion from BibTeX to YAML (using pandoc-citeproc called by `getRefs` or `bib2yaml`) removes a lot of LaTeX tags. But this process is not perfect. The function `cleanRefs` cleans the remaining special characters ('exotic' accents and other LaTeX). Moreover information in BibTeX is not uniform for authors, so this function also clean author names (detection of family names with particle, removal of uppercase except for each first letter of family and given names, and shorten given name). Note that journal, booktitle and article/chapter title are also not uniform but this information comes from Scopus that is more standardize than Crossref. Finally we have to mention that cleaned YAML files erase their previous versions (this function does not return any object). If errors occur and if you still have BibTeX, you can use the function `bib2yaml` to regenerate the erased YAML file.

See Also

`getRefs`, `bib2yaml`

Examples

```
# Coming soon...
```

detectBin *Detect a command binary*

Description

detectBin detects and returns the path to a command binary.

Usage

```
detectBin(bin)
```

Arguments

bin	a system command to be detected, as a character string.

Value

The path to the command binary.

Examples

```
detectBin('cd')
```

getRefs *Retrieve author references from Scopus and Crossref APIs*

Description

This function queries the Scopus Search API to returned a list of references for one specific author. Quality of metadata is increased by coupling Scopus results with a query of the Crossref API called using the package rcrossref. Results are returned as BibTeX files (one per reference) but user can also choose two other formats: YAML and JSON. The conversion is proceeded using pandoc and pandoc-citeproc (must be separately installed).

Usage

```
getRefs(api_key = NULL, author_id = NULL, date = NULL,
  sort = "pubyear", sleep = 5, folder = ".", format = c("bibtex",
  "yaml"), erase = FALSE)
```

Arguments

`api_key` A string indicating the user Scopus API Key obtained from the Elsevier Developer Portal

`author_id` A string indicating the Scopus identifier of the author for which references have to be retrieve

`date` A string indicating the year (or a range of years) for which references have to be retrieve (if `NULL`, default, all references listed in Scopus for this author will be returned)

`sort` A string indicating the field by which references will be ordered (one of `artnum`, `citedby-count`, `publicationName`, `pubyear`)

`sleep` A positive numeric indicating the time interval (in seconds) between two consecutive Scopus queries (a Scopus query response is limited to 25 entries)

`folder` A string indicating the folder (relative or absolute path) to write references

`format` A string indicating the references format (the possible formats are `bibtex`, `yaml` and `json`)

`erase` A boolean specifing if a reference that already exists in the folder must be rewritten (`TRUE`) or not (`FALSE`)

Details

Before using this function user has to get a free Scopus API Key from the Elsevier Developer Portal (`https://dev.elsevier.com/user/registration`). He also needs to know the author Scopus identifer by visiting the Scopus Author Search Portal (`https://www.scopus.com/freelookup/form/author.uri`). This function works in four steps: 1) Get a list of references from Scopus API and keep only those with a DOI (all fields are returned except the authors list); 2) Complete the metadata (mainly the authors list) using the Crossref API called by the function `cr_cn` (request by DOI); 3) Merge metadata from the two sources and keep the best (hopefully); 4) Write references (one file per reference) in the specified formats using pandoc-citeproc (for YAML and JSON). We strongly recommend to convert references in YAML (and also keep BibTeX formats) because this step (performed with pandoc-citeproc) translates a large amount of LaTeX tags (mainly accented characters). But if you prefer you can also export references in BibTeX and then use the function `bib2yaml` to convert them in YAML.

Value

A list of BibTeX strings. BibTeX (if required) and other specified formats are also written in the directory specified by the argument `folder`.

See Also

`bib2yaml`, `cleanRefs`

Examples

```
# Coming soon...
```

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