

Package ‘rgnparser’

February 13, 2023

Title Parse Scientific Names

Description Parse scientific names using 'gnparser' (<<https://github.com/gnames/gnparser>>), written in Go. 'gnparser' parses scientific names into their component parts; it utilizes a Parsing Expression Grammar specifically for scientific names.

Version 0.2.6

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URL <https://ropensci.github.io/rgnparser/>,
<https://github.com/ropensci/rgnparser>

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

Encoding UTF-8

Language en-US

SystemRequirements gnparser (<<https://github.com/gnames/gnparser>>)

Imports sys, tibble, jsonlite, readr

Suggests testthat

RoxygenNote 7.2.3

Config/testthat/start-first install_gnparser

NeedsCompilation no

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rgnparser-package	<i>rgnparser</i>
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Description

Parse scientific names using gnparser

gn_debug	<i>gn_debug</i>
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Description

DEFUNCT

Usage

```
gn_debug(...)
```

Arguments

...	ignored
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gn_parse	<i>gn_parse</i>
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Description

extract names using gnparser

Usage

```
gn_parse(
  x,
  threads = NULL,
  batch_size = NULL,
  ignore_tags = FALSE,
  details = FALSE
)
```

Arguments

x	(character) vector of scientific names. required
threads	(integer/numeric) number of threads to run. CPU's threads number is the default. default: 4
batch_size	(integer/numeric) maximum number of names in a batch send for processing. default: NULL
ignore_tags	(logical) ignore HTML entities and tags when parsing. default: FALSE
details	(logical) Return more details for a parsed name

Value

a list

Examples

```
trys <- function(x) try(x, silent=TRUE)
if (interactive()) {
x <- c("Quadrella steyermarkii (Standl.) Iltis & Cornejo",
      "Parus major Linnaeus, 1788", "Helianthus annuus var. texanus")
trys(gn_parse(x[1]))
trys(gn_parse(x[2]))
trys(gn_parse(x[3]))
trys(gn_parse(x))
# details
w <- trys(gn_parse(x, details = TRUE))
w[[1]]$details # details for one name
lapply(w, "[[", "details") # details for all names
z <- trys(gn_parse(x, details = FALSE)) # compared to regular
z
}
```

gn_parse_tidy

gn_parse_tidy

Description

extract names using gnparser into a tidy tibble

Usage

```
gn_parse_tidy(x, threads = 4, batch_size = NULL, ignore_tags = FALSE)
```

Arguments

x	(character) vector of scientific names. required
threads	(integer/numeric) number of threads to run. CPU's threads number is the default. default: 4
batch_size	(integer/numeric) maximum number of names in a batch send for processing. default: NULL
ignore_tags	(logical) ignore HTML entities and tags when parsing. default: FALSE

Details

This function focuses on a data.frame result that's easy to munge downstream - note that this function does not do additional details as does `gn_parse()`.

Value

a data.frame

Examples

```
trys <- function(x) try(x, silent=TRUE)
if (interactive()) {
x <- c("Quadrella steyermarkii (Standl.) Iltis & Cornejo",
      "Parus major Linnaeus, 1788", "Helianthus annuus var. texanus")
trys(gn_parse_tidy(x))
}
```

gn_version

gn_version

Description

get gnparser version information

Usage

```
gn_version()
```

Value

named list, with version and build

Examples

```
trys <- function(x) try(x, silent=TRUE)
if (interactive()) {
trys(gn_version())
}
```

install_gnparser	<i>Install gnparser</i>
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Description

Downloads the appropriate gnparser executable for your platform and tries to copy it to a system directory so **rgnparser** can run the gnparser command.

Usage

```
install_gnparser(version = "latest", force = FALSE)
```

Arguments

version	The gnparser version number, e.g., 1.0.0; the default latest means the latest version (fetched from GitHub releases). Alternatively, this argument can take a file path of the zip archive or tarball of gnparser that has already been downloaded from GitHub, in which case it will not be downloaded again. The minimum version is v1.0.0 because gnparser v1 introduced breaking changes - and we don't support older versions of gnparser here.
force	Whether to install gnparser even if it has already been installed. This may be useful when upgrading gnparser.

Details

This function tries to install gnparser to `Sys.getenv('APPDATA')` on Windows, `~/Library/Application Support` on macOS, and `~/bin/` on other platforms (such as Linux). If these directories are not writable, the package directory gnparser of **rgnparser** will be used. If it still fails, you have to install gnparser by yourself and make sure it can be found via the environment variable `PATH`.

This is just a helper function and may fail to choose the correct gnparser executable for your operating system, especially if you are not on Windows or Mac or a major Linux distribution. When in doubt, read the gnparser documentation and install it yourself: <https://github.com/gnames/gnparser#installation>

Note

modified from blogdown: :install_hugo

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