Package 'pkgsearch'

October 26, 2022
Title Search and Query CRAN R Packages
Version 3.1.2
Description Search CRAN metadata about packages by keyword, popularity, recent activity, package name and more. Uses the 'R-hub' search server, see https://r-pkg.org and the CRAN metadata database, that contains information about CRAN packages. Note that this is _not_ a CRAN project.
License MIT + file LICENSE
<pre>URL https://github.com/r-hub/pkgsearch,</pre>
https://r-hub.github.io/pkgsearch/
BugReports https://github.com/r-hub/pkgsearch/issues
Imports curl, jsonlite, parsedate (>= 1.3.0), prettyunits
Suggests mockery, covr, memoise, pillar, pingr (>= 2.0.0), rstudioapi, shiny, shinyjs, shinyWidgets, testthat (>= 2.1.0), whoami
Encoding UTF-8
RoxygenNote 7.2.0.9000
NeedsCompilation no
Author Gábor Csárdi [aut, cre], Maëlle Salmon [aut] (https://orcid.org/0000-0002-2815-0399), R Consortium [fnd]
Maintainer Gábor Csárdi <csardi.gabor@gmail.com></csardi.gabor@gmail.com>
Repository CRAN
Date/Publication 2022-10-26 09:02:36 UTC
R topics documented:
advanced_search cran_events cran_new cran_package

2 advanced_search

	cran_packages	6
	cran_package_history	7
	cran_top_downloaded	7
	cran_trending	8
	pkg_search	8
	pkg_search_addin	10
r1		10
Index		12

advanced_search

Advanced CRAN package search

Description

See the Elastic documentation for the syntax and features: https://www.elastic.co/guide/en/elasticsearch/reference/current/quedsl-query-string-query.html

Usage

```
advanced_search(
    ...,
    json = NULL,
    format = c("short", "long"),
    from = 1,
    size = 10
)
```

Arguments

•••	Search terms. For named terms, the name specifies the field to search for. For unnamed ones, the term is taken as is. The individual terms are combined with the AND operator.
json	A character string that contains the query to send to Elastic. If this is not NULL, then you cannot specify any search terms in
format	Default formatting of the results. <i>short</i> only outputs the name and title of the packages, <i>long</i> also prints the author, last version, full description and URLs. Note that this only affects the default printing, and you can still inspect the full results, even if you specify <i>short</i> here.
from	Where to start listing the results, for pagination.
size	The number of results to list.

Value

Search hits.

cran_events 3

```
# All orphaned packages
advanced_search(Maintainer = "ORPHANED")
# Packages with both Hester and Wickham as authors
advanced_search(Author = "Hester", Author = "Wickham")
advanced_search("Author: Hester AND Author: Wickham")
# Packages with Hester but not Wickham as author
advanced_search(Author = "Hester AND NOT Wickham")
# Packages with Hester as an Author, and Wickham in any field
advanced_search(Author = "Hester", "Wickham")
# Packages with Hester as an Author and Wickham nowhere in the metadata
advanced_search(Author = "Hester", "NOT Wickham")
# Packages for permutation tests and permissive licenses
advanced_search("permutation test AND NOT License: GPL OR GNU")
# Packages that have a certain field
advanced_search("_exists_" = "URL")
# Packages that do not have a certain field:
advanced_search("NOT _exists_: URL")
# The same but as JSON query
query <- '{
"query": {
  "bool": {
    "must_not": {
      "exists": {
        "field": "URL"
     }
   }
 }
}
advanced_search(json = query)
# Regular expressions
advanced_search(Author = "/Joh?nathan/")
# Fuzzy search
advanced_search(Author = "Johnathan~1")
```

4 cran_new

Description

List of all CRAN events (new, updated, archived packages)

Usage

```
cran_events(releases = TRUE, archivals = TRUE, limit = 10, from = 1)
## S3 method for class 'cran_event_list'
summary(object, ...)
## S3 method for class 'cran_event_list'
print(x, ...)
```

Arguments

releases Whether to include package releases.

archivals Whether to include package archivals.

limit Number of events to list.

11mile rumber of events to fist.

from Where to start the list, for pagination.

object Object to summarize.

... Additional arguments are ignored currently.

x Object to print.

Value

List of events.

Examples

```
cran_events()
cran_events(limit = 5, releases = FALSE)
cran_events(limit = 5, archivals = FALSE)
summary(cran_events(limit = 10))
```

cran_new

New CRAN packages

Description

List the latest new CRAN packages.

Usage

```
cran_new(from = "last-week", to = "now", last = Inf)
```

cran_package 5

Arguments

from

Start of the time interval to query. Possible values:

- "last-week"
- "last-month"
- A Date object to be used as a start date.
- A POSIXt object to be used as the start date.
- A difftime object to used as the time interval until now.
- An integer scalar, the number of days until today.
- A character string that is converted to a start date using as.POSIXct().

to

End of the time interval to query. It accepts the same kinds of values as from, and additionally it can also be the string "now", to specify the current date and time.

last

Integer to limit the number of returned packages.

Value

Data frame of package descriptions.

Examples

```
# Last week
cran_new("last-week")

# Last month
cran_new("last-month")

# Last 5 days
cran_new(from = 5)

# From a given date, but at most 10
cran_new(from = "2021-04-06", last = 10)

# March of 2021
cran_new(from = "2021-03-01", to = "2021-04-01")
```

cran_package

Metadata about a CRAN package

Description

Metadata about a CRAN package

Usage

```
cran_package(name, version = NULL)
```

6 cran_packages

Arguments

name Name of the package.

version The package version to query. If NULL, the latest version if returned.

Value

The package metadata, in a named list.

Examples

```
cran_package("pkgsearch")
```

cran_packages

Metadata about multiple CRAN packages

Description

Metadata about multiple CRAN packages

Usage

```
cran_packages(names)
```

Arguments

names

Package names. May also contain versions, separated by a @ character.

Value

A data frame of package metadata, one package per row.

```
# Get metadata about one package
cran_packages("rhub")
# Get metadata about two packages
cran_packages(c("rhub", "testthat"))
# Get metadata about two packages at given versions
cran_packages(c("rhub@1.1.1", "testthat@2.2.1", "testthat@2.2.0"))
# If a version does not exist nothing is returned
cran_packages("rhub@notaversion")
```

cran_package_history 7

```
cran_package_history Query the history of a package
```

Description

Query the history of a package

Usage

```
cran_package_history(package)
```

Arguments

package

Package name.

Value

A data frame, with one row per package version.

Examples

```
cran_package_history("igraph")
```

cran_top_downloaded

Top downloaded packages

Description

Last week.

Usage

```
cran_top_downloaded()
```

Details

You can use the cranlogs package to get more flexibility into what is returned.

Value

Data frame of top downloaded packages.

```
cran_top_downloaded()
```

pkg_search

cran_trending

Trending R packages

Description

Trending packages are the ones that were downloaded at least 1000 times during last week, and that substantially increased their download counts, compared to the average weekly downloads in the previous 24 weeks. The percentage of increase is also shown in the output.

Usage

```
cran_trending()
```

Value

Data frame of trending packages.

Examples

```
cran_trending()
```

pkg_search

Search CRAN packages

Description

pkg_search() starts a new search query, or shows the details of the previous query, if called without arguments.

```
ps() is an alias to pkg_search().
```

more() retrieves that next page of results for the previous query.

Usage

```
pkg_search(query = NULL, format = c("short", "long"), from = 1, size = 10)

ps(query = NULL, format = c("short", "long"), from = 1, size = 10)

more(format = NULL, size = NULL)

## S3 method for class 'pkg_search_result'
summary(object, ...)

## S3 method for class 'pkg_search_result'
print(x, ...)
```

pkg_search 9

Arguments

query Search query string. If this argument is missing or NULL, then the results of

the last query are printed, in *short* and *long* formats, in turns for successive pkg_search() calls. If this argument is missing, then all other arguments are

ignored.

format Default formatting of the results. *short* only outputs the name and title of the

packages, *long* also prints the author, last version, full description and URLs. Note that this only affects the default printing, and you can still inspect the full

results, even if you specify short here.

from Where to start listing the results, for pagination.

size The number of results to list.

object Object to summarize.

... Additional arguments, ignored currently.

x Object to print.

Details

Note that the search needs a working Internet connection.

Value

A data frame with columns:

- score: Score of the hit. See Section Scoring for some details.
- package: Package name.
- version: Latest package version.
- title: Package title.
- description: Short package description.
- date: Time stamp of the last release.
- maintainer_name: Name of the package maintainer.
- maintainer_email: Email address of the package maintainer.
- revdeps: Number of (strong and weak) reverse dependencies of the package.
- downloads_last_month: Raw number of package downloads last month, from the RStudio CRAN mirror.
- license: Package license.
- url: Package URL(s).
- bugreports: URL of issue tracker, or email address for bug reports.

10 pkg_search_addin

Examples

```
# Example
ps("survival")
# Pagination
ps("networks")
more()
# Details
ps("visualization")
ps()
# See the underlying data frame
ps("ropensci")
ps()[]
```

pkg_search_addin

RStudio addin to search CRAN packages

Description

Call this function from RStudio for best results. You can also use it without RStudio, then it will run in the web browser.

Usage

```
pkg_search_addin(query = "", viewer = c("dialog", "browser"))
```

Arguments

query

Query string to start the addin with.

Whether to show the addin within RStudio ("dialog"), or in a web browser viewer

("browser").

Details

The app has:

- A search tab for free text search, very much like the pkg_search() function.
- The list of recently updated packages.
- The list of top packages: most downloaded, most depended upon, and trending packages.
- Package list by maintainer.

pkg_search_addin 11

```
pkg_search_addin()

# Start with a search query
pkg_search_addin("permutation test")
```

Index

```
advanced_search, 2
as.POSIXct(), 5
\verb|cran_events|, 3
cran_new, 4
cran_package, 5
cran_package_history, 7
cran_packages, 6
cran_top_downloaded, 7
cran_trending, 8
Date, 5
difftime, 5
\verb|more|(pkg\_search), 8|
\mathsf{pkg\_search}, \textcolor{red}{8}
pkg_search(), 10
pkg_search_addin, 10
POSIXt, 5
print.cran_event_list(cran_events), 3
\verb|print.pkg_search_result(pkg_search)|, 8
ps (pkg_search), 8
summary.cran_event_list(cran_events), 3
summary.pkg_search_result (pkg_search),
         8
```