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
URL  https://github.com/r-hub/pkgsearch,
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>
Repository  CRAN
Date/Publication  2022-10-26 09:02:36 UTC

R topics documented:

advanced_search .................................................. 2
cran_events ........................................................ 3
cran_new ............................................................. 4
cran_package ........................................................ 5
advanced_search

cran_packages ................................. 6
cran_package_history .......................... 7
cran_top_downloaded ......................... 7
cran_trending ................................. 8
pkg_search ..................................... 8
pkg_search_addin .............................. 10

Index 12

---------------------------------------------
advanced_search  Advanced CRAN package search

Description


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. 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.

Value

Search hits.
Examples

# 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")
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.
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

Description

List the latest new CRAN packages.

Usage

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

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 POSIXlt 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")
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.

Examples

# 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  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.

Examples
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**

```r
cran_trending()
```

**Value**

Data frame of trending packages.

**Examples**

```r
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**

```r
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)
```
pkg_search

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

Examples

pkg_search_addin()

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

advanced_search, 2
as.POSIXct(), 5

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

more (pkg_search), 8

pkg_search, 8
pkg_search(), 10
pkg_search_addin, 10
POSIXt, 5

print.cran_event_list (cran_events), 3
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