Package ‘rcheology’

March 2, 2024

Version  4.3.3.0
Title    Data on Base and Recommended Packages for Current and Previous Versions of R
Description
  Provides a dataset of functions in all base and recommended packages of R versions 0.50 onwards.
License  CC0
URL      https://github.com/hughjonesd/rcheology
BugReports https://github.com/hughjonesd/rcheology/issues
Depends  R(>= 2.10)
Encoding UTF-8
LazyData true
ByteCompile true
RoxygenNote 7.2.3
Suggests testthat (>= 3.0.0)
Config/testthat/edition 3
NeedsCompilation no
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R topics documented:

  rcheology-package .......................................................... 2
  fun_changed ................................................................. 3
  rcheology ................................................................. 3
  Rversions ................................................................. 4

Index  5
rcheology-package

Data on base packages from current and previous versions of R

Description

rcheology is a data package providing two data frames:

Details

- rcheology lists objects in versions of R from 0.50 onwards.
- Rversions lists R versions and their release dates. NB: For a more complete and "canonical" solution, see the rversions package.

The version of the rcheology package reflects the latest R version to be included in the data, e.g. 3.5.1.x contains data up to and including R 3.5.1.

An online app for data exploration is available at https://hughjonesd.shinyapps.io/rcheology/.

Where the data comes from:

R versions are built using the evercran project.
Results are found from running ls(all.names = TRUE) on all installed packages. For more details, see guest-list-objects.R.
The Rversions data frame lists versions of R and release dates.

Limitations

- Functions not built on the relevant platform - e.g. Windows functions - are not included.
- R 0.60 data is not yet included.
- Functions in package tcltk are not yet included before R 2.0.0.

Historical quirks

- In 2.9.0, package Matrix was mistakenly given priority "Recommended" not "recommended" in the output of installed.packages().
- In 2.5.0, package rcompgen was given priority NA. The NEWS file records it as a recommended package.

Both these errors have been corrected in the rcheology data.
fun_changed

Check if a core R function changed between R versions

**Description**
Check if a core R function changed between R versions

**Usage**
fun_changed(fn, from = NULL, to = NULL, package = NULL)

**Arguments**
- `fn`: Character name of a function in a core R package.
- `from`: Minimum R version (optional).
- `to`: Maximum R version (optional).
- `package`: Name of the package (optional).

**Value**
0 if there was no change. 1 if the function’s arguments changed. 2 if the function was not present in all versions. If the function can’t be found or exists in multiple packages, throws an error.

**Examples**
fun_changed("debugonce")
fun_changed("debugonce", "3.4.0", "3.4.3")
fun_changed("debugonce", "3.3.0", "3.4.3")

rcheology

Data on objects from current and previous versions of R

**Description**
A data frame with every function (and other object) in versions of R from 1.0.1 onwards. Variables are:
- `package`: package the object comes from
- `name`: name of the object
- `Rversion`: version of R as major.minor.patch
- `type`: Result of calling `typeof()` on the object
- `class`: `class()` of the object, separated by slashes if there are multiple classes.
• exported: TRUE if the object name was found in `getNamespaceExports()`. True for anything in the "base" package. NA if the package does not have a namespace (e.g. "datasets" in early versions).

• hidden: TRUE if the object name starts with ".". These objects are not reported by `ls()`.

• S4generic: TRUE if the object is an S4 generic according to `methods::isGeneric()`.

• priority: "base" for base packages, "recommended" for recommended packages. NA for earlier versions of R (pre 1.6.0) when the priority concept did not exist.

• args: the arguments of the function, or NA for non-functions

<table>
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<tr>
<th>Rversions</th>
<th>Previous R versions with dates</th>
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**Description**

A data frame with 2 variables:

• `Rversion`: version of R as major.minor.patch

• `date`: date of release

**Details**

This goes back to 0.x releases. For 2.15.1-w, see here.
Index

class(), 3
fun_changed, 3
getNamespaceExports(), 4
installed.packages(), 2
ls(), 4
methods::isGeneric(), 4
rheology, 2, 3
rheology-package, 2
Rversions, 2, 4
typeof(), 3