

# Package ‘rcheology’

January 2, 2019

**Version** 3.5.2.0

**Title** Data on Base Packages for Current and Previous Versions of R

**Description** Provides a dataset of functions in all base packages of R versions 1.0.1 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** 6.1.1

**NeedsCompilation** no

**Author** David Hugh-Jones [aut, cre]

**Maintainer** David Hugh-Jones <davidhughjones@gmail.com>

**Repository** CRAN

**Date/Publication** 2019-01-02 13:40:03 UTC

## R topics documented:

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

<b>Index</b>	<b>5</b>
--------------	----------

---

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 all versions of R from 1.0.1 onwards.
- [Rversions](#) lists R versions and their release dates.

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/>.

## How the data is created

Previous R versions are downloaded and installed on a Docker image. Objects in all base packages are then listed. (Note that recommended packages, like `nnet` or `MASS`, are not installed.) For functions, the `formals()` of the function are recorded.

- Versions 3.0.1 and up are installed from the [CRAN apt repositories for Ubuntu Trusty Tahr](#). Version 3.5.0 and up use a [special repository](#).
- Versions 2.5.1 to 3.0.0 are built from source on [Ubuntu Lucid Lynx](#).
- Versions 1.2.3 to 2.4.1 are built from source on [Debian Sarge](#).
- Versions 1.0.1 to 1.2.2, and versions 1.7.0 and 1.7.1, are built from source on [Debian Woody](#).

## Limitations

- Functions not built on the relevant platform - e.g. Windows functions - are not included.
- Because data is collected using the original R version, it is subject to changes in the way R works. For example, before 2.5.0, `args()` didn't work on Primitive functions, so those functions have no value in the `args` column.
- I have failed to build `tcltk` on R versions 1.0.1-1.4.1 and 1.7.0/1, so there's no `tcltk` data for these versions. If you can help, get in touch.

---

fun_changed	<i>Check if a core R function changed between R versions</i>
-------------	--

---

**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	<i>Data on objects from current and previous versions of R</i>
-----------	--

---

**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).
- `generic`: TRUE if the object is an (S4) generic according to `methods::isGeneric()`
- `args`: the arguments of the function, or NA for non-functions

---

Rversions

*Previous R versions with dates*

---

### **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

`args()`, [2](#)

`class()`, [3](#)

`formals()`, [2](#)

`fun_changed`, [3](#)

`getNamespaceExports()`, [4](#)

`methods::isGeneric()`, [4](#)

`rcheology`, [2](#), [3](#)

`rcheology-package`, [2](#)

`Rversions`, [2](#), [4](#)

`typeof()`, [3](#)