Package: hoardr (via r-universe)

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Type Package

Title Manage Cached Files

Description Suite of tools for managing cached files, targeting use in other R packages. Uses 'rappdirs' for cross-platform paths. Provides utilities to manage cache directories, including targeting files by path or by key; cached directories can be compressed and uncompressed easily to save disk space.

Version 0.5.4

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URL https://docs.ropensci.org/hoardr/,
 https://github.com/ropensci/hoardr

BugReports https://github.com/ropensci/hoardr/issues

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Contents

	hoardr-package hoard																		
Index																			6
hoar	dr-package	ho	oare	dr															

Description

Manage Cached Files

Details

hoardr is a tiny package with just a single export hoard(). The package goal is to make it easy to setup, use, and manage cached files for another R package. In addition, you can export functions in your own package using hoardr for users to manage their cached files.

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hoard hoardr class

Description

hoardr class

Arguments

path	(character) a path to cache files in. required
type	(character) type of cache. One of "user_cache_dir" (default), "user_log_dir", "user_data_dir", "user_config_dir", "site_data_dir", "site_config_dir". Can also
	pass in any function that gives a path to a directory, e.g., tempdir(). required.

Details

For the purposes of caching, you'll likely want to stick with user_cache_dir, but you can change the type of cache with the type parameter.

hoard is just a tiny wrapper around HoardClient\$new(), which isn't itself exported, but you can use it if you want via :::

Methods

cache_path_get() Get the cache path return: (character) path to the cache directory

cache_path_set(path = NULL, type = "user_cache_dir", prefix = "R", full_path = NULL) Set the cache path. By default, we set cache path to file.path(user_cache_dir, prefix, path). Note that this does not actually make the directory, but just sets the path to it.

- path (character) the path to be appended to the cache path set by type
- type (character) the type of cache, see rappdirs
- prefix (character) prefix to the path value. Default: "R"
- full_path (character) instead of using path, type, and prefix just set the full path with this parameter

return: (character) path to the cache directory just set

list() List files in the directory (full file paths) **return**: (character) vector of file paths for files in the cache

mkdir() Make the directory if doesn't exist already return: TRUE, invisibly

delete(files, force = TRUE) Delete files by name

- files (character) vector/list of file paths
- force (logical) force deletion? Default: TRUE

return: nothing

delete_all(force = TRUE) Delete all files

• force (logical) force deletion? Default: FALSE

return: nothing

details(files = NULL) Get file details

• files (character) vector/list of file paths

return: objects of class cache_info, each with brief summary info including file path and file size

keys(algo = "md5") Get a hash for all files. Note that these keys may not be unique if the files are identical, leading to identical hashes **return**: (character) hashes for the files

key(x, algo = "md5") Get a hash for a single file. Note that these keys may not be unique if the files are identical, leading to identical hashes

- x (character) path to a file
- algo (character) the algorithm to be used, passed on to digest::digest(), choices: md5 (default), sha1, crc32, sha256, sha512, xxhash32, xxhash64 and murmur32.

return: (character) hash for the file

files() Get all files as HoardFile objects **return**: (character) paths to the files

compress() Compress files into a zip file - leaving only the zip file **return**: (character) path to the cache directory

uncompress() Uncompress all files and remove zip file **return**: (character) path to the cache directory

exists(files) Check if files exist

• files: (character) one or more files, paths are optional

return: (data.frame) with two columns:

- files: (character) file path
- exists: (boolean) does it exist or not

Examples

```
(x \leftarrow hoard())
x$cache_path_set(path = "foobar", type = 'tempdir')
x$path
x$cache_path_get()
# Or you can set the full path directly with `full_path`
mydir <- file.path(tempdir(), "foobar")</pre>
x$cache_path_set(full_path = mydir)
x$path
x$cache_path_get()
# make the directory if doesn't exist already
x$mkdir()
# list files in dir
x$list()
cat(1:10000L, file = file.path(x$cache_path_get(), "foo.txt"))
x$list()
# add more files
cat(letters, file = file.path(x$cache_path_get(), "foo2.txt"))
cat(LETTERS, file = file.path(x$cache_path_get(), "foo3.txt"))
# see if files exist
x$exists("foo.txt") # exists
x$exists(c("foo.txt", "foo3.txt")) # both exist
x$exists(c("foo.txt", "foo3.txt", "stuff.txt")) # one doesn't exist
# cache details
x$details()
# delete files by name - we prepend the base path for you
x$delete("foo.txt")
x$list()
x$details()
# delete all files
cat("one\ntwo\nthree", file = file.path(x$cache_path_get(), "foo.txt"))
cat("asdfasdf asd fasdf", file = file.path(x$cache_path_get(), "bar.txt"))
x$delete_all()
x$list()
# make/get a key for a file
cat(1:10000L, file = file.path(x$cache_path_get(), "foo.txt"))
x$keys()
x$key(x$list()[1])
# as files
Map(function(z) z$exists(), x$files())
```

```
# compress and uncompress
x$compress()
x$uncompress()

# reset cache path
x$cache_path_set(path = "stuffthings", type = "tempdir")
x
x$cache_path_get()
x$list()

# cleanup
unlink(x$cache_path_get())
```

Index

```
* package
    hoardr-package, 2

digest::digest(), 3

hoard, 2
hoard(), 2
hoardr (hoardr-package), 2
hoardr-package, 2

rappdirs, 3
```