Package 'makeit'

March 17, 2025

Version 1.0.2

Date 2025-03-18

Title Run R Scripts if Needed

Suggests dplyr, ggplot2, knitr, readr, rmarkdown

Description Automation tool to run R scripts if needed, based on last modified time. It comes with no package dependencies, organizational overhead, or structural requirements. In short: run an R script if underlying files have changed, otherwise do nothing.

License GPL-3

URL https://github.com/arni-magnusson/makeit

VignetteBuilder knitr

Encoding UTF-8

RoxygenNote 7.3.2

NeedsCompilation no

Author Arni Magnusson [aut, cre]

Maintainer Arni Magnusson <thisisarni@gmail.com>

Repository CRAN

Date/Publication 2025-03-17 22:40:02 UTC

Contents

---

make   *Run R Script if Needed*

Description

Run an R script if underlying files have changed, otherwise do nothing.

Usage

```
make(recipe, prereq, target, include = TRUE, details = FALSE,
  force = FALSE, recon = FALSE, quiet = FALSE, ...)
```

Arguments

recipe	script filename.
prereq	one or more files required by the script. For example, data files, scripts, or NULL.
target	one or more output files produced by the script. Directory names can also be used.
include	whether to automatically include the script itself as a prerequisite file. This means that if the script file has been modified, it should be run.
details	whether to show a diagnostic table of files and time last modified.
force	whether to run the R script unconditionally.
recon	whether to return TRUE or FALSE, without actually running the R script.
quiet	whether to suppress messages.
...	passed to source.

Details

A make() call has the general form

make("analysis.R", "input.dat", "output.dat")

which can be read aloud as:

"script *x* uses *y* to produce *z*"

Value

TRUE or FALSE, indicating whether the script was run.

Note

This function provides functionality similar to makefile rules, to determine whether a script should be (re)run or not.

If any target is either missing or is older than any prereq, then the script is run.

References

Stallman, R. M. *et al*. An introduction to makefiles. Chapter 2 in the *GNU Make manual*.

See Also

See `vignette("makeit")` for annotated examples and discussion.

`file.exists` and `file.mtime` are the underlying functions used to check if files are missing or have changed.

`source` is the underlying function to run a script.

Examples

```
# Copy examples 'analysis' and 'sequential' to temporary directory
exdir <- tempdir()
file.copy(system.file("examples/analysis", package="makeit"),
          exdir, recursive=TRUE)
file.copy(system.file("examples/sequential", package="makeit"),
          exdir, recursive=TRUE)
owd <- getwd()

# This analysis uses input.dat to produce output.dat
setwd(file.path(exdir, "analysis"))
dir()
make("analysis.R", "input.dat", "output.dat")  # Running analysis.R
dir()
make("analysis.R", "input.dat", "output.dat")  # Nothing to be done

# Suppress message, show last modified
make("analysis.R", "input.dat", "output.dat", quiet=TRUE)
make("analysis.R", "input.dat", "output.dat", details=TRUE)

# Sequential scripts
setwd(file.path(exdir, "sequential"))
print.simple.list(dir(recursive=TRUE))
make("01_model.R", "data.dat", "results.dat")
make("02_plots.R", "results.dat", c("plots/A.png", "plots/B.png"))
make("03_tables.R", "results.dat", c("tables/A.csv", "tables/B.csv"))
print.simple.list(dir(recursive=TRUE))

# Clean up
unlink(file.path(exdir, c("analysis", "sequential")), recursive=TRUE)
setwd(owd)

# See vignette("makeit") for more examples and discussion
```

Index