

# Package: repana (via r-universe)

October 17, 2024

**Type** Package

**Title** Repeatable Analysis in R

**Version** 2.2.0.9000

**URL** <https://github.com/johnaponte/repana>,  
<https://johnaponte.github.io/repana/>

**Description** Set of utilities to facilitate the reproduction of analysis in R. It allow to `make_structure()`, `clean_structure()`, and run and log programs in a predefined order to allow secondary files, analysis and reports be constructed in an ordered and reproducible form.

**License** GPL (>= 3)

**Encoding** UTF-8

**RoxygenNote** 7.3.1

**Depends** DBI (>= 1.0)

**Suggests** spelling, testthat, knitr, RSQLite, RPostgres, duckdb, pacman, targets

**Imports** config, dplyr, magrittr, lubridate, rmarkdown, processx, readr, rstudioapi, pool, openxlsx, tools, yaml, digest

**Language** en-US

**VignetteBuilder** knitr

**Roxygen** list(markdown = TRUE)

**Repository** <https://johnaponte.r-universe.dev>

**RemoteUrl** <https://github.com/johnaponte/repana>

**RemoteRef** HEAD

**RemoteSha** 163d220bbcfbaf3b888a1dd3e9d9c53151343a35

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addDataTable	<i>A wrap to <a href="#">writeDataTable</a></i>
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### Description

Include a data.frame into a workbook applying a tableStyle and an auto width to the column. For better results you could setup options("openxlsx.minWidth" = 6)

### Usage

```
addDataTable(
  wb,
  df,
  sheet,
  tableName,
  tableStyle = "TableStyleMedium1",
  withFilter = TRUE,
  firstActiveCol = NULL,
  ...
)
```

### Arguments

wb	a workbook object
df	a data.frame
sheet	the sheet name. If missing the name of the data.frame
tableName	a name for the table in the excel document. If missing the name of the data.frame
tableStyle	a tableStyle name

withFilter      if TRUE the filter is included  
firstActiveCol First column active on the the freeze panel  
...              other parameters for the [writeDataTable](#)

**Value**

silently the wb

**Examples**

```
## Not run:  
library(openxlsx)  
options("openxlsx.minWidth" = 6)  
wb <- createWorkbook(title = "Test addDataTable")  
addDataTable(wb, iris)  
saveWorkbook(wb, "test_addDataTable.xlsx")  
  
## End(Not run)
```

---

clean_database	<i>Helper function to drop all tables from a database</i>
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---

**Description**

Helper function to drop all tables from a database

**Usage**

```
clean_database(con)
```

**Arguments**

con              DBI connection

**Value**

invisible, a list with result from [DBI](#)

---

clean_structure	<i>Clean the secondary files of the project</i>
-----------------	---

---

**Description**

Delete and make new database, logs and reports directory

**Usage**

```
clean_structure()
```

**Value**

Invisible, the directories defined by the clean\_before\_new\_analysis entry in the config.yml file.

**Author(s)**

John J. Aponte

---

get_con	<i>Get a DBI connection reading a configuration file</i>
---------	--

---

**Description**

This function get a DBI connection to a database reading the parameters from a config.yml file using the [get](#) function. See the vignette for details.

**Usage**

```
get_con(configname = "defaultdb", file = "config.yml")
```

**Arguments**

configname	a string with the name of the configuration
file	name of the configuration to read from.

**Value**

a DBI connection

**Author(s)**

John J. Aponte

---

get_dirs	<i>Get the dirs section of the config.yml file</i>
----------	--

---

**Description**

It is a wrap of `config::get("dirs")`.

**Usage**

```
get_dirs(file = "config.yml")
```

**Arguments**

file                   by default the config.yml file

**Value**

a list with the directory entries

---

get_pool	<i>Get a pool connection reading a configuration file</i>
----------	---

---

**Description**

This function get a pool connection to a database reading the parameters from a config.yml file using the [get](#) function. See the vignette for details.

**Usage**

```
get_pool(configname = "defaultdb", file = "config.yml")
```

**Arguments**

configname           a string with the name of the value  
file                   name of the configuration to read from.

**Value**

a [dbPool](#) connection object

**Author(s)**

John J. Aponte

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insert_template	<i>RStudio addin app to insert a template to the heading part of a snip code</i>
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---

**Description**

RStudio addin app to insert a template to the heading part of a snip code

**Usage**

```
insert_template()
```

**Value**

The template to insert

---

make_structure	<i>Make the structure for a new project</i>
----------------	---

---

**Description**

Make the following directories

- data to keep the data necessary for the project
- database to keep the secondary, modified dataset and objects
- handmade to keep reports and dataset modified by hand or not make by the automatic stream
- logs to keep logs of the automatic stream
- reports to keep the automatic reports

The data, handmade are not clean. The rest are clean as they should be reproduced by the automatic stream. Do not forget to include them in `.gitignore` if you use `git`

**Usage**

```
make_structure()
```

**Value**

the dir structure

**Author(s)**

John J. Aponte

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master	<i>Render programs</i>
--------	------------------------

---

### Description

By default, all programs with the pattern "nn\_" will be executed in order. The 'Start' and 'Stop' parameters can be used to modify the files to start or stop at a different number.

### Usage

```
master(
  start = 0,
  stop = Inf,
  format = "html",
  logdir = config::get("dirs")$logs
)
```

### Arguments

start	program to start
stop	program to stop
format	Format to render the programs values accepted are "pdf", "html" and "word"
logdir	directory to keep the logs of the files. By default the entry on the config.yml dirs:logs

### Details

The files are treated as *snip* files for rmarkdown and render in the log directory, with the format specified in the *format* parameter.

The default the log directory is configured in the config.yml file.

### Value

a data.frame with the files run, running time and exit status

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master_txt	<i>Runs the programs</i>
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### Description

Run the programs specified by the pattern, in the order as the pattern select the files. Keep a log of the results. By default the pattern starting with two numbers and ending with .R is selected. They are run in order

**Usage**

```

master_txt(
  pattern = "[0-9][0-9].*\\.R$",
  start = 1,
  stop = Inf,
  logdir = config::get("dirs")$logs,
  rscript_path
)

```

**Arguments**

pattern	Regular expression to select the files to run
start	index of the program to start
stop	index of the program to stop
logdir	directory to keep the logs of the files. By default
rscript_path	path to the Rscript file the entry on the config.yml dirs:logs

**Details**

The program add (or create if not exists) the files run, time of execution and exit status in the file master.log of the directory logs.

WARNING: This is a legacy program. Use master instead.

**Value**

a data.frame with the files run, running time and exit status

---

render_report	<i>A wrap to render a markdown report</i>
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---

**Description**

Render the report and copy it to the outputdir directory. More formats are available but only three are included here ‘

**Usage**

```
render_report(report, format = "pdf", outputdir = get_dirs())$reports, ...)
```

**Arguments**

report	filename of the report
format	output format. "pdf","html","word" are valid entries
outputdir	directory to save the report
...	other parameters for <a href="#">render</a> function



**Value**

No return value, called for side effects to render the reports

**See Also**

[render](#)

**Examples**

```
## Not run:  
render_report(myreport.rmd, "pdf")  
  
## End(Not run)
```

---

targets\_structure      *Create configuration to use targets*

---

**Description**

Create if they do not exist the following directories

- R
- dat
- out

**Usage**

```
targets_structure()
```

**Details**

If does not exists, create a simplify version of the `_targets.R` script, modify the `.gitignore`. Also add a `config.yml` and a `_template.txt` files.

**Examples**

```
## Not run:  
targets_structure()  
  
## End(Not run)
```

---

update_table	<i>Helper function to include a data.frame in the database and update the log</i>
--------------	---

---

**Description**

Helper function to include a data.frame in the database and update the log

**Usage**

```
update_table(con, table, source, tablename)
```

**Arguments**

con	DBI connection
table	the data.frame to be included in the database
source	a manual comment to identify the source of the table
tablename	if present, the data frame will be saved with this name.

**Value**

the result from [DBI](#) otherwise the name of the data.frame

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write_log	<i>Make a log of the updates on the database</i>
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---

**Description**

Make a log of the database updates. If the log table does not exist it creates it. Make a new entry with the timestamp of the update.

**Usage**

```
write_log(con, tablename, source)
```

**Arguments**

con	DBI connection
tablename	the name of the table
source	a manual comment to identify the source of the table

**Value**

the result from [DBI](#)

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