

Package: minired (via r-universe)

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Title R Interface to 'Redatam' Library

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Description Provides an API to work with 'Redatam' (see <<https://www.redatam.org>>) databases in both formats: 'RXDB' (new format) and 'DICX' (old format) and running 'Redatam' programs written in 'SPC' language. It's a wrapper around 'Redatam' core and provides functions to open a database ('redatam_open()'), list entities and variables from the database ('redatam_entities()', 'redatam_variables()') and execute a 'SPC' program and gets the results as data frames ('redatam_query()'/redatam_run()).

License GPL (>= 3)

Encoding UTF-8

Language en-US

RoxygenNote 7.3.2

NeedsCompilation yes

LinkingTo cpp11

SystemRequirements 'Redatam' runtime engine (see <https://redatam.org>),
The dynamic binary library is downloaded from
<<https://redatam-core.s3.us-west-2.amazonaws.com>> during the
build step. Currently supported platforms are Windows and Linux
(both for x86-64 processors only)

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outputs	<i>Environment for Outputs Tables</i>
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Description

This environment is created to store the outputs generated by a Redatam program execution. The environment contains TABLES (Redatam outputs) generated from `FREQ`, `AREALIST`, `MATOP`, `TABLIS` commands. You can't modify objects contained in this environment.

Usage

```
outputs
```

Format

An object of class environment of length 0.

Examples

```
## Not run:
library(minired)
dic<-redatam_open("c:/nmir/nmiresp.rxd")
df<-redatam_query(dic,"tbl1<-freq person.sexo")
# Accessing the tbl1 object from environment
redatam::outputs$tbl1
# Accessing the output from Global Environment
print(tbl1)

## End(Not run)
```

redatam_close	<i>Close dictionary</i>
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Description

Close a REDATAM database.

Usage

```
redatam_close(dic)
```

Arguments

dic Dictionary ID (returned by 'redatam.open')

Value

No return value.

Author(s)

Jaime Salvador

Examples

```
## Not run:  
dic<-redatam_open("path/to/rxdb")  
# run some queries using 'query' or 'run'  
redatam_close(dic);  
  
## End(Not run)
```

redatam_entities	<i>List entities</i>
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Description

List the entities in a database.

Usage

```
redatam_entities(dic)
```

Arguments

dic Dictionary ID (returned by 'redatam.open')

Value

Data frame that contains all the entities in the database.

Author(s)

Jaime Salvador

Examples

```
## Not run:  
dic<-redatam_open("path/to/rxdb")  
redatam_entities(dic);
```

```
## End(Not run)
```

redatam_internal_query

Execute a Redatam command from text

Description

Execute a Redatam command: TABLE or AREALIST.

Usage

```
redatam_internal_query(dic, spc)
```

Arguments

dic	Dictionary identifier
spc	Program text in SPC format

Value

Raw dataset with al values: tot, na, mv, values.

Author(s)

Jaime Salvador

Examples

```
## Not run:  
dic<-redatam_open("path/to/rxdb")  
df<-redatam_internal_query(dic, "freq person.sexo")
```

```
## End(Not run)
```

redatam_internal_run *Execute a Redatam command from file*

Description

Execute a Redatam command: TABLE or AREALIST.

Usage

```
redatam_internal_run(dic, file_name)
```

Arguments

dic	Dictionary identifier
file_name	Program file name

Value

Raw dataset with all values: tot, na, mv, values.

Author(s)

Jaime Salvador

Examples

```
## Not run:  
dic<-redatam.open("rxd")  
df<-redatam.internal_run(dic,"/path/to/nmir_test.spc")  
  
## End(Not run)
```

redatam_open *Open dictionary*

Description

Open a REDATAM database. This function returns an ID than can be used in functions to query data.

Usage

```
redatam_open(dictionary_name)
```

Arguments

dictionary_name
Dictionary filename

Value

ID than can be used in functions to query data.

Author(s)

Jaime Salvador

Examples

```
## Not run:
dic<-redatam_open("path/to/rxdb")

## End(Not run)
```

redatam_query	<i>Execute a Redatam command from text</i>
---------------	--

Description

Execute a Redatam command: TABLE or AREALIST. This function removes all the rows that contain total, na or mv values. Additionally, this function removes the "mask" columns.

Usage

```
redatam_query(dic, spc, tot.omit = TRUE)
```

Arguments

dic Dictionary identifier
 spc Program text in SPC format
 tot.omit Omit rows containing total, na y mv values

Value

If the program contains more than one table, the method returns the last table (in the SPC program) as a data frame. All the tables are registered (as data frames) in a custom environment called 'redatam::outputs'.

Author(s)

Jaime Salvador

Examples

```
## Not run:
dic<-redatam_open("path/to/rxdb")
df<-redatam_query(dic,"freq person.sexo")

## End(Not run)
```

redatam_run

Execute a Redatam command from file

Description

Execute a Redatam command: TABLE or AREALIST. This function removes all the rows that contain total, na or mv values. Additionally, this function removes the "mask" columns.

Usage

```
redatam_run(dic, file_name, tot.omit = TRUE)
```

Arguments

dic	Dictionary identifier
file_name	Program file name
tot.omit	Omit rows containing total, na y mv values

Value

If the program contains more than one table, the method returns the last table (in the SPC program) as a data frame. All the tables are registered (as data frames) in a custom environment called 'redatam::outputs'.

Author(s)

Jaime Salvador

Examples

```
## Not run:
dic<-redatam_open("path/to/rxdb")
df<-redatam_run(dic,"/path/to/nmir_test.spc")

## End(Not run)
```

redatam_save	<i>Save dictionary</i>
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Description

Save a REDATAM database. This function can be used to save a dictionary.

Usage

```
redatam_save(dic, name = "")
```

Arguments

dic	Dictionary identifier
name	Dictionary filename

Value

No return value.

Author(s)

Jaime Salvador

Examples

```
## Not run:  
dic<-redatam_open("path/to/rxdb")  
...  
redatam_save(dic,"path/to/new/dictionary.rxdb")  
  
## End(Not run)
```

redatam_variables	<i>List variables for entity</i>
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Description

List the variables in an entity.

Usage

```
redatam_variables(dic, entity_name)
```


Arguments

dic Dictionary ID (returned by 'redatam.open')
entity_name Entity's name

Value

Data frame that contains all the variables from the 'entity_name'.

Author(s)

Jaime Salvador

Examples

```
## Not run:  
dic<-redatam_open("path/to/rxdb")  
redatam_variables(dic, "person")  
  
## End(Not run)
```

redatam_version *Get the Redatam API version*

Description

Returns the current version of the native Redatam API.

Usage

```
redatam_version()
```

Value

String with the Redatam Engine version.

Author(s)

Jaime Salvador

Examples

```
redatam_version()
```

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