

Package: dabr (via r-universe)

September 13, 2024

Title Database Management with R

Version 0.0.4

Description Provides functions to manage databases: select, update, insert, and delete records, list tables, backup tables as CSV files, and import CSV files as tables.

License GPL-3

Encoding UTF-8

Roxygen list(markdown = TRUE)

RoxygenNote 7.2.1

URL <https://github.com/special-uor/dabr/>,
<https://special-uor.github.io/dabr/>,
<https://research.reading.ac.uk/palaeoclimate/>

BugReports <https://github.com/special-uor/dabr/issues/>

Language en-GB

Imports knitr, magrittr, RMariaDB, tibble

Repository <https://special-uor.r-universe.dev>

RemoteUrl <https://github.com/special-uor/dabr>

RemoteRef HEAD

RemoteSha 5c223451c8c2538fb010591668edd8146429151e

Contents

attributes	2
close_conn	2
delete	3
get_attr	4
insert	4
is.connected	5
list_tables	6
open_conn_mysql	6

quote	7
select	8
select_all	9
update	10

Index 11

attributes	<i>Combine attributes</i>
------------	---------------------------

Description

Combine attributes from a vector of strings.

Usage

```
attributes(...)
```

Arguments

... Strings.

Value

Combined string with all the attributes.

Examples

```
dabr::attributes("A", "B", "C")
dabr::attributes(c("A", "B", "C"))
dabr::attributes(c("A", "B", "C"), "D", "E", "F")
```

close_conn	<i>Close connection to database</i>
------------	-------------------------------------

Description

Close connection to database

Usage

```
close_conn(conn, ...)

## S3 method for class 'MariaDBConnection'
close_conn(conn, ...)

## Default S3 method:
close_conn(conn, ...)
```

Arguments

conn	DB connection object.
...	Optional parameters.

See Also

Other DB functions: [delete\(\)](#), [insert\(\)](#), [list_tables\(\)](#), [open_conn_mysql\(\)](#), [select_all\(\)](#), [select\(\)](#), [update\(\)](#)

Examples

```
## Not run:  
conn <- open_conn_mysql("sys", "root")  
close_conn(conn)  
  
## End(Not run)
```

delete	<i>Execute DELETE query</i>
--------	-----------------------------

Description

Execute DELETE query

Usage

```
delete(conn, ...)  
  
## S3 method for class 'MariaDBConnection'  
delete(conn, ..., quiet = FALSE)
```

Arguments

conn	DB connection object.
...	DELETE query and optional parameters.
quiet	Boolean flag to hide status messages.

See Also

Other DB functions: [close_conn\(\)](#), [insert\(\)](#), [list_tables\(\)](#), [open_conn_mysql\(\)](#), [select_all\(\)](#), [select\(\)](#), [update\(\)](#)

Examples

```
## Not run:
conn <- open_conn_mysql("sys", "root")
out <- delete(conn, "DELETE sys_config SET value = 1")
close_conn(conn)

## End(Not run)
```

get_attr	<i>Get attributes of a table</i>
----------	----------------------------------

Description

Get attributes of a table

Usage

```
get_attr(conn, ...)
```

S3 method for class 'MariaDBConnection'

```
get_attr(conn, name, ...)
```

Arguments

conn	DB connection object.
...	Optional parameters.
name	Table name.

Value

List of attributes for table name.

insert	<i>Execute INSERT query</i>
--------	-----------------------------

Description

Execute INSERT query

Usage

```
insert(conn, ...)
```

S3 method for class 'MariaDBConnection'

```
insert(conn, ..., quiet = FALSE)
```

Arguments

conn	DB connection object.
...	INSERT query and optional parameters.
quiet	Boolean flag to hide status messages.

See Also

Other DB functions: [close_conn\(\)](#), [delete\(\)](#), [list_tables\(\)](#), [open_conn_mysql\(\)](#), [select_all\(\)](#), [select\(\)](#), [update\(\)](#)

Examples

```
## Not run:
conn <- open_conn_mysql("sys", "root")
query <- paste0(
  "INSERT INTO sys_config (variable, value, set_time, set_by) VALUES ",
  "('test_var', 999, '', Sys.time(), '', NULL)"
)
out <- insert(conn, query)
close_conn(conn)

## End(Not run)
```

is.connected	<i>Verify connection</i>
--------------	--------------------------

Description

Verify if connection object is still valid, is connected to the database server.

Usage

```
is.connected(conn, ...)

## S3 method for class 'MariaDBConnection'
is.connected(conn, ...)
```

Arguments

conn	DB connection object.
...	Optional parameters.

Value

Connection status.

list_tables *List tables*

Description

List tables

Usage

```
list_tables(conn, ...)
```

```
## S3 method for class 'MariaDBConnection'  
list_tables(conn, quiet = FALSE, attr = TRUE, ...)
```

Arguments

conn	DB connection object.
...	Optional parameters.
quiet	Boolean flag to hide status messages.
attr	Boolean flag to list the attributes of each table.

Value

If quiet = TRUE returns a list with the tables' names. If attr = TRUE includes each attribute of the tables.

See Also

Other DB functions: [close_conn\(\)](#), [delete\(\)](#), [insert\(\)](#), [open_conn_mysql\(\)](#), [select_all\(\)](#), [select\(\)](#), [update\(\)](#)

open_conn_mysql *Connect to database*

Description

Uses RMariaDB to open a connection to a MySQL database.

Usage

```
open_conn_mysql(  
  dbname,  
  user = "root",  
  password = NULL,  
  host = "127.0.0.1",  
  port = 3306  
)
```

Arguments

dbname	Database/Schema name.
user	Username of database owner.
password	Password (default: NULL).
host	Database host, it can be local (default) or remote.
port	Database port.

Value

MariaDBConnection connection object.

See Also

Other DB functions: [close_conn\(\)](#), [delete\(\)](#), [insert\(\)](#), [list_tables\(\)](#), [select_all\(\)](#), [select\(\)](#), [update\(\)](#)

Examples

```
## Not run:  
conn <- open_conn_mysql("sys")  
  
## End(Not run)
```

quote	<i>Add single quotes</i>
-------	--------------------------

Description

Add single quotes to string.

Usage

```
quote(str)
```

Arguments

str	String.
-----	---------

Value

String surrounded by single quotes

Examples

```
dabr::quote("A")  
dabr::quote("l'A")
```

select	<i>Execute SELECT query</i>
--------	-----------------------------

Description

Execute SELECT query

Usage

```
select(conn, ...)  
  
## S3 method for class 'MariaDBConnection'  
select(conn, ..., quiet = FALSE)
```

Arguments

conn	DB connection object.
...	SELECT query and optional parameters.
quiet	Boolean flag to hide status messages.

Value

Data frame containing the selected records.

See Also

Other DB functions: [close_conn\(\)](#), [delete\(\)](#), [insert\(\)](#), [list_tables\(\)](#), [open_conn_mysql\(\)](#), [select_all\(\)](#), [update\(\)](#)

Examples

```
## Not run:  
conn <- open_conn_mysql("sys", "root")  
out <- select(conn, "SELECT variable, value FROM sys_config")  
close_conn(conn)  
  
## End(Not run)
```

select_all	<i>Select all the records</i>
------------	-------------------------------

Description

Select all the records inside a particular table, use the table parameter.

Usage

```
select_all(conn, ...)
```

```
## S3 method for class 'MariaDBConnection'  
select_all(conn, table, quiet = FALSE, ...)
```

Arguments

conn	MariaDBConnection connection object.
...	Optional parameters.
table	Name of the table.
quiet	Boolean flag to hide status messages.

Value

Data frame with records.

See Also

Other DB functions: [close_conn\(\)](#), [delete\(\)](#), [insert\(\)](#), [list_tables\(\)](#), [open_conn_mysql\(\)](#), [select\(\)](#), [update\(\)](#)

Examples

```
## Not run:  
conn <- dabr::open_conn_mysql("sys", "root")  
out <- dabr::select_all(conn, "sys_config")  
dabr::close_conn(conn)  
  
## End(Not run)
```

update	<i>Execute UPDATE query</i>
--------	-----------------------------

Description

Execute UPDATE query

Usage

```
update(conn, ...)
```

```
## S3 method for class 'MariaDBConnection'  
update(conn, ..., quiet = FALSE)
```

Arguments

conn	DB connection object.
...	UPDATE query and optional parameters.
quiet	Boolean flag to hide status messages.

See Also

Other DB functions: [close_conn\(\)](#), [delete\(\)](#), [insert\(\)](#), [list_tables\(\)](#), [open_conn_mysql\(\)](#), [select_all\(\)](#), [select\(\)](#)

Examples

```
## Not run:  
conn <- open_conn_mysql("sys", "root")  
out <- update(conn, "UPDATE sys_config SET value = 1")  
close_conn(conn)  
  
## End(Not run)
```

Index

* DB functions

- close_conn, 2
- delete, 3
- insert, 4
- list_tables, 6
- open_conn_mysql, 6
- select, 8
- select_all, 9
- update, 10

attributes, 2

close_conn, 2, 3, 5–10

delete, 3, 3, 5–10

get_attr, 4

insert, 3, 4, 6–10

is.connected, 5

list_tables, 3, 5, 6, 7–10

open_conn_mysql, 3, 5, 6, 6, 8–10

quote, 7

select, 3, 5–7, 8, 9, 10

select_all, 3, 5–8, 9, 10

update, 3, 5–9, 10