

Package: odbc32 (via r-universe)

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Title 32-bit ODBC drivers for 64-bit R sessions

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Description Tools for using 32-bit ODBC drivers from 64-bit R sessions. Based on socket connection between 64-bit R and host 32-bit R.

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Remotes github::vh-d/r2r

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 odbc32-package

odbc32: 32-bit ODBC drivers for 64-bit R sessions

Description

Tools for using 32-bit ODBC drivers from 64-bit R sessions. Based on socket connection between 64-bit R and host 32-bit R.

| | |
|-------------|--|
| .append_con | <i>Append a (new) connection to a global list of connections</i> |
|-------------|--|

Description

Append a (new) connection to a global list of connections

Usage

```
.append_con(con)
```

Arguments

con

Value

a reference (index) number to the list of all connections

Examples

```
#TBA
```

| | |
|--------------|---------------------------------|
| close.odbc32 | <i>Closes odbc32 connection</i> |
|--------------|---------------------------------|

Description

Closes odbc32 connection

Usage

```
## S3 method for class 'odbc32'  
close(con)
```

Arguments

con odbc32 connection object

Value

logical

Examples

```
TBA
```

connect_remotely *Connect to Database Via ODBC using RODB*

Description

This helper function is used by

- [odbcConnectAccess](#)
- [odbcConnectAccess2007](#)
- [odbcConnect](#)
- [odbcDriverConnect](#)

Usage

```
connect_remotely(socket, FUN, ns = "RODBC", ...)
```

Arguments

| | |
|--------|--------------------------------|
| socket | socket |
| FUN | function to be called remotely |
| ... | arguments to be passed to FUN |

Value

odbc32 object

create_odbc32_object *Create Object of Class "odbc32"*

Description

Create Object of Class "odbc32"

Usage

```
create_odbc32_object(socket, ref)
```

Arguments

| | |
|--------|---|
| socket | socket |
| ref | reference returned by eval_remote |

| | |
|-------------|---|
| data2access | <i>writing data into MS Access via 32bit R session script</i> |
|-------------|---|

Description

Procedure for easier exporting of data from an R into MS Access database via separate 32-bit R session script

Usage

```
data2access(
  data,
  accdb_file,
  overwrite = FALSE,
  fast = TRUE,
  safer = TRUE,
  rownames = FALSE,
  ...
)
```

Arguments

| | |
|------------|--|
| data | a named list of tables |
| accdb_file | path to accdb file |
| overwrite | logical; TRUE for an attempt to drop each table first. |
| fast | passed to RDOBC::sqlSave |
| safer | passed to RDOBC::sqlSave |
| rownames | passed to RDOBC::sqlSave |
| ... | passed to RDOBC::sqlSave |

Details

overwrite logical; Attempt to drop any existing table of the name before writing data?

convert_dates character; Convert dates as text before writing into database.

| | |
|----------------|-----------------------|
| default_socket | <i>Default Socket</i> |
|----------------|-----------------------|

Description

Currently, this is just a shortcut to `.GlobalEnv$.r2r_socket`

Usage

```
default_socket()
```

| | |
|----------------|--|
| getSqlTypeInfo | <i>Specify or retrieve a mapping of R types to DBMS datatypes.</i> |
|----------------|--|

Description

Specify or retrieve a mapping of R types to DBMS datatypes.

Usage

```
getSqlTypeInfo(con, driver)
```

```
setSqlTypeInfo(con, driver, value)
```

```
setSqlTypeInfo2(con, driver, value)
```

Arguments

| | |
|-----|---------------|
| con | odbc32 object |
|-----|---------------|

| | |
|-------|---------------------------------|
| value | passed to RODBC::setSqlTypeInfo |
|-------|---------------------------------|

Details

setSqlTypeInfo2 is a custom implementation for cases when setSqlTypeInfo fails on "locked environment" error

Value

For setSqlTypeInfo none. For getSqlTypeInfo with an argument, a named list. Without an argument, a data frame.

| | |
|-----------|--------------------------------|
| odbcClose | <i>close odbc32 connection</i> |
|-----------|--------------------------------|

Description

close odbc32 connection

Usage

```
odbcClose(con)
```

Arguments

| | |
|-----|--------------------------|
| con | odbc32 connection object |
|-----|--------------------------|

| | |
|-------------|--|
| odbcConnect | <i>establish ODBC connection defined by DSN name</i> |
|-------------|--|

Description

establish ODBC connection defined by DSN name

Usage

```
odbcConnect(dsn, uid = "", pwd = "", socket = default_socket())
```

Arguments

| | |
|--------|-----------|
| dsn | dsn |
| uid | user name |
| pwd | password |
| socket | socket |

| | |
|-------------------|--|
| odbcConnectAccess | <i>Connect to an Access database (*.mdb)</i> |
|-------------------|--|

Description

Connect to an Access database (*.mdb)

Usage

```
odbcConnectAccess(access.file, uid = "", pwd = "", socket = default_socket())
```

Arguments

| | |
|-------------|-------------------|
| access.file | path to .mdb file |
| uid | user name |
| pwd | password |

Value

odbc32 object

Examples

```
#TBA
```

odbcConnectAccess2007 *Connect to an Access 2007 database*

Description

Connect to an Access 2007 database

Usage

```
odbcConnectAccess2007(  
  access.file,  
  uid = "",  
  pwd = "",  
  socket = default_socket()  
)
```

Arguments

| | |
|-------------|---------------------|
| access.file | path to .accdb file |
| uid | user name |
| pwd | password |

Value

odbc32 object

Examples

```
#TBA
```

odbcDataSources *list data sources*

Description

list data sources

Usage

```
odbcDataSources(type = c("all", "user", "system"), socket = default_socket())
```

Arguments

| | |
|------|--|
| type | see type param of RODBC::odbcDataSources() |
|------|--|

| | |
|-------------------|---|
| odbcDriverConnect | <i>establish ODBC connection based on a connection string</i> |
|-------------------|---|

Description

establish ODBC connection based on a connection string

Usage

```
odbcDriverConnect(..., socket = default_socket())
```

Arguments

| | |
|--------|---|
| ... | other args passed to RODBC::odbcDriverConnect() |
| socket | |

| | |
|-------------|-------------------------------|
| odbcEndTran | <i>clear/empty a db table</i> |
|-------------|-------------------------------|

Description

clear/empty a db table

Usage

```
odbcEndTran(con, commit)
```

Arguments

| | |
|--------|--------------------------|
| con | odbc32 connection object |
| commit | logical |

| | |
|---------------|--------------------------|
| odbcGetErrMsg | <i>Get error message</i> |
|---------------|--------------------------|

Description

Get error message

Usage

```
odbcGetErrMsg(con)
```

Arguments

| | |
|-----|---------------|
| con | odbc32 object |
|-----|---------------|

| | |
|-------------|---|
| odbcGetInfo | <i>Information on an ODBC connection.</i> |
|-------------|---|

Description

see RODBC::odbcGetInfo()

Usage

```
odbcGetInfo(con)
```

Arguments

| | |
|-----|--------------------------|
| con | odbc32 connection object |
|-----|--------------------------|

| | |
|--------------|-------------------------------------|
| package_file | <i>Path to File in This Package</i> |
|--------------|-------------------------------------|

Description

Path to File in This Package

Usage

```
package_file(..., mustWork = FALSE)
```

Arguments

| | |
|----------|---------------------------------------|
| ... | passed to system.file |
| mustWork | passed to system.file |

Value

absolute file path to a file in the installation folder of this package

| | |
|--------------|--------------------------------|
| print.odbc32 | <i>print method for odbc32</i> |
|--------------|--------------------------------|

Description

print method for odbc32

Usage

```
## S3 method for class 'odbc32'  
print(x)
```

Arguments

x odbc32 object

Value

printed odbc32 object

Examples

```
#TBA
```

| | |
|---------------------|-------------------------------------|
| remote_access_query | <i>Query over remote connection</i> |
|---------------------|-------------------------------------|

Description

Query over remote connection

Usage

```
remote_access_query(...)
```

Arguments

... is passed to r2r::do.call_remote

Value

whatever the call on the remote R session returns

Examples

```
#TBA
```

| | |
|--------------|---|
| rscript_path | <i>Path to Rscript.exe (on Windows)</i> |
|--------------|---|

Description

Path to Rscript.exe (on Windows)

Usage

```
rscript_path(arch = "i386")
```

Arguments

arch architecture: "i386" for 32 bit or "x64" for 64 bit

Value

absolute file path to "Rscript.exe"

| | |
|----------|-------------------------------|
| sqlClear | <i>clear/empty a db table</i> |
|----------|-------------------------------|

Description

clear/empty a db table

Usage

```
sqlClear(con, name)
```

Arguments

con odbc32 connection object
name name of db table to be dropped

| | |
|---------|------------------------|
| sqlDrop | <i>drop a db table</i> |
|---------|------------------------|

Description

drop a db table

Usage

sqlDrop(con, name)

Arguments

| | |
|------|--------------------------------|
| con | odbc32 connection object |
| name | name of db table to be dropped |

| | |
|----------|-----------------------|
| sqlFetch | <i>fetch db table</i> |
|----------|-----------------------|

Description

fetch db table

Usage

sqlFetch(con, name, ...)

sqlFetchMore(con, ...)

Arguments

| | |
|------|--|
| con | odbc32 connection object |
| name | name of db table to be dropped |
| ... | other args passed to RODBC::sqlFetch() on remote |

Value

data.frame

| | |
|----------|---|
| sqlQuery | <i>send query to a db and get results</i> |
|----------|---|

Description

send query to a db and get results

Usage

```
sqlQuery(con, query, errors = NULL, ...)
```

Arguments

| | |
|-------|--|
| con | odbc32 connection object |
| query | text of the query |
| ... | other args passed to RODBC::sqlQuery() on remote |

| | |
|---------|-----------------------------|
| sqlSave | <i>upload table to a db</i> |
|---------|-----------------------------|

Description

upload table to a db

Usage

```
sqlSave(con, data, name = NULL, ...)
```

Arguments

| | |
|------|---|
| con | odbc32 object |
| data | tabular data |
| name | name of the resulting db table |
| ... | other args passed to RODBC::sqlSave() on remote |

| | |
|-----------|--------------------------|
| sqlTables | <i>list tables in DB</i> |
|-----------|--------------------------|

Description

list tables in DB

Usage

```
sqlTables(con, errors = NULL, ...)
```

Arguments

| | |
|--------|---|
| con | odbc32 connection object |
| errors | ignored |
| ... | other args passed to RODBC::sqlTables() on remote |

| | |
|-----------|------------------------|
| sqlUpdate | <i>update db table</i> |
|-----------|------------------------|

Description

update db table

Usage

```
sqlUpdate(con, data, name = NULL, ...)
```

Arguments

| | |
|------|---|
| con | odbc32 connection object |
| data | tabular data object |
| name | name of the resulting db table |
| ... | other args passed to RODBC::sqlUpdate() on remote |

| | |
|--------------|--|
| start_server | <i>Start a new R session with a running r2r server</i> |
|--------------|--|

Description

Start a new R session with a running r2r server

Usage

```
start_server(  
  address = "tcp://localhost",  
  port = pbdZMQ::random_open_port(),  
  arch = "i386",  
  Rbin = rscript_path(arch),  
  r_args = NULL,  
  invisible = FALSE,  
  wait = FALSE,  
  global = TRUE,  
  debug = FALSE  
)
```

Arguments

| | |
|-----------|---|
| address | host address |
| port | port |
| arch | architecture |
| Rbin | path to Rscript binary |
| r_args | further arguments to Rscript command |
| invisible | logical; visibility of the new session window |

Value

socket connection (invisible)

Examples

```
#TBA
```

`start_server_access2007`

Start r2r server connected to an Access database over 32-bit ODBC driver

Description

Start r2r server connected to an Access database over 32-bit ODBC driver

Usage

```
start_server_access2007(  
  accdb_fp,  
  invisible = FALSE,  
  wait = FALSE,  
  address = "tcp://*",  
  port = pbdZMQ::random_open_port(),  
  arch = "i386",  
  Rbin = rscript_path(arch)  
)
```

`stop_server`

Stop r2r server running on a remote R session

Description

Stop r2r server running on a remote R session

Usage

```
stop_server(...)
```

Arguments

```
...          args passed to r2r::stop_remote()
```

Value

logical

Examples

```
#TBA
```

| | |
|-----------------|--|
| write_access_db | <i>export data from Rdata file into MS Access db via separate 32-bit Rscript</i> |
|-----------------|--|

Description

export data from Rdata file into MS Access db via separate 32-bit Rscript

Usage

```
write_access_db(rdata_file)
```

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