# Package 'RGreenplum'

October 12, 2022
Title Interface to 'Greenplum' Database
Version 0.1.2
<b>Description</b> Fully 'DBI'-compliant interface to 'Greenplum' <a href="https://greenplum.org/">https://greenplum.org/</a> , an open-source parallel database. This is an extension of the 'RPostgres' package <a href="https://github.com/r-dbi/RPostgres">https://github.com/r-dbi/RPostgres</a> .
License GPL-2
<pre>URL https://github.com/mwillumz/RGreenplum</pre>
BugReports https://github.com/mwillumz/RGreenplum/issues
Encoding UTF-8
LazyData true
<b>Depends</b> R (>= 3.1.0)
Imports DBI, RPostgres, methods
Suggests DBItest, testthat
RoxygenNote 6.0.1
Collate 'GreenplumDriver.R' 'GreenplumConnection.R' 'table-create.R' 'tables.R'
NeedsCompilation no
Author Michael Williams [aut, cre]
Maintainer Michael Williams <mw8765999@gmail.com></mw8765999@gmail.com>
Repository CRAN
<b>Date/Publication</b> 2018-06-24 11:44:18 UTC
R topics documented:
dbConnect,GreenplumDriver-method dbIsValid,GreenplumDriver-method dbWriteTable,GreenplumConnection,character,data.frame-method Greenplum sqlCreateTable,GreenplumConnection-method
Index

```
db Connect, {\tt GreenplumDriver-method}
```

Connect to a Greenplum database.

# Description

Manually disconnecting a connection is not necessary with RGreenplum, but still recommended; if you delete the object containing the connection, it will be automatically disconnected during the next GC with a warning.

# Usage

```
## S4 method for signature 'GreenplumDriver'
dbConnect(drv, dbname = NULL, host = NULL,
  port = NULL, password = NULL, user = NULL, service = NULL, ...,
  bigint = c("integer64", "integer", "numeric", "character"))
```

which allows the full range of 64 bit integers.

# Arguments

bigint

drv	'RGreenplum::Greenplum()'
dbname	Database name. If 'NULL', defaults to the user name. Note that this argument can only contain the database name, it will not be parsed as a connection string (internally, 'expand_dbname' is set to 'false' in the call to ['PQconnectdbParams()'](https://www.postgres.connect.html)).
host, port	Host and port. If 'NULL', will be retrieved from 'PGHOST' and 'PGPORT' env vars.
user, password	User name and password. If 'NULL', will be retrieved from 'PGUSER' and 'PGPASSWORD' envvars, or from the appropriate line in '~/.pgpass'. See <a href="http://www.postgresql.org/docs/9.6/static/libpq-pgpass.html">http://www.postgresql.org/docs/9.6/static/libpq-pgpass.html</a> for more details.
service	Name of service to connect as. If 'NULL', will be ignored. Otherwise, connection parameters will be loaded from the pg_service.conf file and used. See <a href="http://www.postgresql.org/docs/9.6/static/libpq-pgservice.html">http://www.postgresql.org/docs/9.6/static/libpq-pgservice.html</a> for details on this file and syntax.
	Other name-value pairs that describe additional connection options as described at <a href="http://www.postgresql.org/docs/9.6/static/libpq-connect.html#LIBPQ-PARAMKEYWORDS">http://www.postgresql.org/docs/9.6/static/libpq-connect.html#LIBPQ-PARAMKEYWORDS</a>

The R type that 64-bit integer types should be mapped to, default is [bit64::integer64],

 ${\it db Is Valid}, {\it Greenplum Driver-method} \\ {\it Greenplum ~db Is Valid ~method}$ 

# **Description**

Greenplum dbIsValid method

#### Usage

```
## S4 method for signature 'GreenplumDriver'
dbIsValid(dbObj, ...)
```

# **Arguments**

db0bj database object
... other arguments for method

 $\label{lem:connection} db \textit{WriteTable}, \textit{GreenplumConnection}, \textit{character}, \textit{data}. \textit{frame-method} \\ \textit{Greenplum} \ \textit{dbWriteTable} \ \textit{method}$ 

#### **Description**

Greenplum dbWriteTable method

Greenplum dbExistsTable method

# Usage

```
## S4 method for signature 'GreenplumConnection, character, data.frame'
dbWriteTable(conn, name,
    value, ..., row.names = FALSE, overwrite = FALSE, append = FALSE,
    field.types = NULL, temporary = FALSE, distributed_by = NULL,
    copy = TRUE)

## S4 method for signature 'GreenplumConnection, character'
dbExistsTable(conn, name, ...)
```

4 Greenplum

#### **Arguments**

conn a [GreenplumConnection-class] object a character string specifying a table name. Names will be automatically quoted name so you can use any sequence of characters, not just any valid bare table name. value A data.frame to write to the database. Other arguments used by individual methods. Either TRUE, FALSE, NA or a string row.names overwrite a logical specifying whether to overwrite an existing table or not. Its default is FALSE. a logical specifying whether to append to an existing table in the DBMS. Its append default is FALSE. field.types character vector of named SQL field types where the names are the names of new table's columns. temporary If TRUE, will generate a temporary table statement. distributed\_by Distribution columns for new table. NULL for random distribution.

If TRUE, data will be copied to remote database

# **Description**

сору

This driver never needs to be unloaded and hence 'dbUnload()' is a null-op.

# Usage

Greenplum()

# **Examples**

library(RPostgres)
RGreenplum::Greenplum()

 $sql Create Table, Greenplum Connection-method \\ Greenplum \ sql Create Table \ method$ 

#### **Description**

Greenplum sqlCreateTable method

# Usage

```
## S4 method for signature 'GreenplumConnection'
sqlCreateTable(con, table, fields,
  row.names = NA, temporary = FALSE, distributed_by = NULL, ...)
```

#### Arguments

con A database connection.

table Name of the table. Escaped with [dbQuoteIdentifier()].

fields Either a character vector or a data frame.

A named character vector: Names are column names, values are types. Names

are escaped with [dbQuoteIdentifier()]. Field types are unescaped. A data frame: field types are generated using [dbDataType()].

row.names Either TRUE, FALSE, NA or a string.

If TRUE, always translate row names to a column called "row\_names". If FALSE, never translate row names. If NA, translate rownames only if they're a character

vector.

A string is equivalent to TRUE, but allows you to override the default name.

For backward compatibility, NULL is equivalent to FALSE.

temporary If 'TRUE', will generate a temporary table statement.

distributed\_by Distribution columns for new table. NULL for random distribution.

. . . Other arguments used by individual methods.

# **Index**