

Package ‘TSPostgreSQL’

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Title 'TSdbi' Extensions for 'PostgreSQL'

Description A 'PostgreSQL' interface for 'TSdbi'.
Comprehensive examples of all the 'TS*' packages is provided in the vignette Guide.pdf with the 'TSdata' package.

Depends R (>= 2.8.0), TSdbi (>= 2015.1-1)

Imports methods, DBI (>= 0.3.1), tframe, tframePlus, TSsql (>= 2015.1-1), RPostgreSQL

Suggests zoo, tseries, tfplot

BuildVignettes true

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TSdbiMethods

*TSdbi PostgreSQL Methods***Description**

Methods for TSdbi PostgreSQL time series database connection.

Usage

```

PostgreSQL(...)
## S4 method for signature 'PostgreSQLConnection,missing'
TSconnect(q, dbname, host =
  if(!is.null(Sys.getenv("PGHOST"))) Sys.getenv("PGHOST") else "localhost", ...)
## S4 method for signature 'character,TSPostgreSQLConnection'
TSget(serIDs,
  con=getOption("TSconnection"),
  TSrepresentation=getOption("TSrepresentation"),
  tf=NULL, start=tfstart(tf), end=tfend(tf), names=NULL,
  TSdescription=FALSE, TSdoc=FALSE, TSlabel=FALSE, TSource=TRUE,
  vintage=getOption("TSvintage"), panel=getOption("TSpanel"), ...)
## S4 method for signature 'ANY,character,TSPostgreSQLConnection'
TSput(x, serIDs, con, Table=NULL,
  TSdescription.=TSdescription(x), TSdoc.=TSdoc(x), TSlabel.=TSlabel(x),
  TSource.=TSource(x),
  vintage=getOption("TSvintage"), panel=getOption("TSpanel"), ...)
## S4 method for signature 'character,TSPostgreSQLConnection'
TSdates(serIDs, con,
  vintage=getOption("TSvintage"), panel=getOption("TSpanel"), ...)
## S4 method for signature 'character,TSPostgreSQLConnection'
TSdelete(serIDs, con,
  vintage=getOption("TSvintage"), panel=getOption("TSpanel"), ...)
## S4 method for signature 'character,TSPostgreSQLConnection'
TSdescription(x, con, ...)
## S4 method for signature 'character,TSPostgreSQLConnection'
TSdoc(x, con, ...)
## S4 method for signature 'character,TSPostgreSQLConnection'
TSlabel(x, con, ...)
## S4 method for signature 'character,TSPostgreSQLConnection'
TSource(x, con, ...)
## S4 method for signature 'TSPostgreSQLConnection'
TSvintages(con)

```

Arguments

q A character string indicating the query interface to use, or a database connection object.

dbname	The name of the database to which the connection should be established, omitted if q is a database connection object.
con	A database connection object.
serIDs	Character string identifiers for series to extract.
host	A character string indicating the server.
x	data series to put on the database, or a series identifier for TSdescription and TSdoc or, for print, a database connection as returned by TSconnect.
TSrepresentation	time series representation to use for the result.
names	Optional character vector to use for series names.
tf	Optional tframe to use for truncating data. (See tfwindow.)
start	Optional start date to use for truncating data. (See tfwindow.)
end	Optional end date to use for truncating data. (See tfwindow.)
TSdescription	TRUE or FALSE indicating whether description should be extracted
TSdescription.	Description to put on the database.
TSdoc	TRUE or FALSE indicating whether documentation should be extracted.
TSdoc.	Documentation to put on the database.
TSlabel	TRUE or FALSE indicating whether series label should be extracted.
TSlabel.	Short series label to put on the database.
TSsource	TRUE or FALSE indicating whether source indicator should be extracted.
TSsource.	Source indicator to put on the database.
Table	Character string indicating database table. (In TSput this is necessary if it cannot be determined automatically).
vintage	Vintage to be supplied (if supported by db).
panel	Panel to be supplied (if supported by db).
...	Arguments passed to other methods or to RPostgreSQL::PostgreSQL

Details

These are PostgreSQL methods for **TSdbi**. The ... argument to TSconnect can be used to pass the user name and password information to dbConnect. See the **TSdbi** for details and see the vignette distributed with package **TSdata** for more complete examples. Package **TSsql** is required for functions createTSdbTables() and removeTSdbTables(). Typically createTSdbTables() will only be done once, and the tables will not be removed. These steps are done in the example below.

Value

depends.

See Also

[TSdbi-package](#), [dbConnect](#), [TSput](#)

Examples

```

require("tfplot")
## Not run:
conInit <- RPostgreSQL::dbConnect("PostgreSQL", dbname="test")
TSsql::createTSdbTables(conInit, index=FALSE)
con <- TSconnect("PostgreSQL", dbname="test")
z <- ts(rnorm(100), start=c(1975,1), frequency=12)
seriesNames(z) <- "random1"
if(TSexists("random1", con)) TSreplace(z, con) else
TSput(z, con)
z1 <- TSget("random1", con)
tfplot(z1)
z <- ts(matrix(rnorm(100),50,2), start=c(1975,1), frequency=4)
seriesNames(z) <- c("random2","random3")
if(TSexists("random2", con) |
  TSexists("random3", con) ) TSreplace(z, con) else
TSput(z, con)
z2 <- TSget("random2", con)
tfplot(z2)
TSdates("D1", con)
TSdates("random2", con)
TSdates(c("random1","random2","random3"), con)
TMeta("random2", con)
options(TSconnection=con)
z2 <- TSget(c("random2","random3"))
z <- TSdates(c("D1","random2","random3"))
print(z)
TMeta("random2")
TSdelete("random1", con)
TSdelete("random2")
TSsql::removeTSdbTables(con,
  yesIknowWhatIamDoing=TRUE, ToLower=TRUE)

## End(Not run)

```

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