

Package ‘RKinetica’

January 7, 2020

Type Package

Title Kinetica DBI datasource

Version 7.0.1.3

Author Nataliya Tairbekov

Maintainer Nataliya Tairbekov <ntairbekov@kinetica.com>

Description DBI implementation for Kinetica DB (<http://kinetica.com>).

License MIT + file LICENSE

Encoding UTF-8

LazyData true

Imports httr,
RJSONIO,
purrr,
dplyr,
stats,
DBI (>= 0.3.0),
bit64,
hms (>= 0.5.0),
methods

Suggests DBItest, testthat

RoxygenNote 6.1.1

Collate 'RKinetica-package.R'
'kineticaObject.R'
'kineticaDriver.R'
'kineticaConnection.R'
'kineticaResult.R'
'kineticaSQL.R'
'connect.R'
'zzz.R'

R topics documented:

dbAppendTable,KineticaConnection-method 3

dbBind,KineticaResult-method	3
dbCanConnect,KineticaDriver-method	4
dbClearResult,KineticaResult-method	5
dbColumnInfo	5
dbConnect,KineticaDriver-method	6
dbCreateTable,KineticaConnection-method	7
dbDataType,KineticaConnection-method	8
dbDataType,KineticaDriver-method	9
dbDisconnect,KineticaConnection-method	10
dbExecute,KineticaConnection,character-method	11
dbExistsTable,KineticaConnection,character-method	12
dbFetch	13
dbGetInfo	14
dbGetQuery,KineticaConnection,character-method	16
dbGetRowCount,KineticaResult-method	17
dbGetRowsAffected,KineticaResult-method	17
dbGetStatement,KineticaResult-method	18
dbHasCompleted,KineticaResult-method	18
dbIsReadOnly	19
dbIsValid	19
dbListConnections,KineticaDriver-method	21
dbListFields,KineticaConnection,character-method	22
dbListObjects,KineticaConnection-method	23
dbListResults,KineticaConnection-method	23
dbListTables,KineticaConnection-method	24
dbQuoteIdentifier	25
dbQuoteLiteral,KineticaConnection-method	26
dbQuoteString	26
dbReadTable,KineticaConnection,ANY-method	27
dbRemoveTable,KineticaConnection,character-method	28
dbSendQuery,KineticaConnection,character-method	28
dbSendStatement,KineticaConnection,character-method	29
dbUnloadDriver,KineticaDriver-method	30
dbUnquoteIdentifier	30
dbWriteTable,KineticaConnection,ANY-method	31
KineticaObject-class	32
RKinetica	32
show,KineticaDriver-method	33
show,SQL-method	34
SQL	34
sqlAppendTable	35
sqlAppendTableTemplate	36
sqlCreateTable,KineticaConnection-method	36
sqlData	37
summary	38
summary,KineticaObject-method	38
transactions	39

dbAppendTable,KineticaConnection-method
<i>dbAppendTable()</i>

Description

Appends rows to an existing table

Usage

```
## S4 method for signature 'KineticaConnection'
dbAppendTable(conn, name, value, ...,
  row.names = NULL)
```

Arguments

conn	an object of [KineticaConnection-class]
name	character string for table name
value	A data frame. Factors will be converted to character vectors.
...	Other arguments omitted in generic signature
row.names	a flag with logical, character or NULL value

See Also

Other KineticaConnection methods: [dbCreateTable,KineticaConnection-method](#), [dbDataType,KineticaConnection-method](#), [dbDisconnect,KineticaConnection-method](#), [dbExecute,KineticaConnection,character-method](#), [dbExistsTable,KineticaConnection,character-method](#), [dbGetInfo](#), [dbGetQuery,KineticaConnection,character-method](#), [dbIsValid](#), [dbListFields,KineticaConnection,character-method](#), [dbListObjects,KineticaConnection-method](#), [dbListResults,KineticaConnection-method](#), [dbListTables,KineticaConnection-method](#), [dbReadTable,KineticaConnection-method](#), [dbRemoveTable,KineticaConnection,character-method](#), [dbSendQuery,KineticaConnection,character-method](#), [dbSendStatement,KineticaConnection,character-method](#), [dbWriteTable,KineticaConnection,ANY-method](#), [show,KineticaDriver-method](#), [sqlCreateTable,KineticaConnection-method](#), [transactions](#)

dbBind,KineticaResult-method
<i>dbBind()</i>

Description

Binds the prepared statement to parameter values provided

Usage

```
## S4 method for signature 'KineticaResult'
dbBind(res, params, ...)
```

Arguments

<code>res</code>	an object of [KineticaResult-class]
<code>params</code>	A list of bindings, named or unnamed.
<code>...</code>	Other parameters passed on to methods.

See Also

Other KineticaResult methods: [dbClearResult, KineticaResult-method](#), [dbColumnInfo, dbFetch, dbGetInfo, dbGetRowCount, KineticaResult-method, dbGetRowsAffected, KineticaResult-method, dbGetStatement, KineticaResult-method, dbHasCompleted, KineticaResult-method, dbIsValid, show, KineticaDriver-method](#)

`dbCanConnect, KineticaDriver-method`
dbCanConnect()

Description

Method allows to check if provided Kinetica Connection configuration could be used to connect to Kinetica DB instance successfully. It takes all the arguments of `dbConnect` signature, creates a connection and destroys it upon exit.

Usage

```
## S4 method for signature 'KineticaDriver'
dbCanConnect(drv, ...)
```

Arguments

<code>drv</code>	Kinetica driver object
<code>...</code>	Other arguments omitted in generic signature

See Also

Other KineticaDriver methods: [dbConnect, KineticaDriver-method](#), [dbDataType, KineticaDriver-method, dbGetInfo, dbIsValid, dbListConnections, KineticaDriver-method, dbUnloadDriver, KineticaDriver-method, show, KineticaDriver-method](#)

Examples

```
## Not run:
# If you have a Kinetica DB instance running in local docker image,
# the minimum set of parameters to connect is url
dbCanConnect(Kinetica(), url = "http://localhost:9191")
# TRUE
# You can also use host and port combination
dbCanConnect(Kinetica(), host = "127.0.0.1", port = 9191)
```

```
# TRUE
# Remote instances would also require username and password.
dbCanConnect(Kinetica(), host = "127.0.0.1", port = 9191,
  username = "username", password = "Pa$$w0rd")
# TRUE
# You can obscure username and password values by calling RStudio secure dialogue box:
dbCanConnect(Kinetica(), host = "127.0.0.1", port = 9191,
  username = rstudioapi::askForPassword("Kinetic DB user"),
  password = rstudioapi::askForPassword("Kinetic DB password"))
# TRUE

## End(Not run)
```

dbClearResult,KineticarResult-method

dbClearResult()

Description

Clears result, if exists, releasing memory in Connection results environment

Usage

```
## S4 method for signature 'KineticarResult'
dbClearResult(res, ...)
```

Arguments

- res [KineticarResult-class]
- ... Other parameters passed on to methods.

See Also

Other KineticarResult methods: [dbBind,KineticarResult-method](#), [dbColumnInfo](#), [dbFetch](#), [dbGetInfo](#), [dbGetRowCount,KineticarResult-method](#), [dbGetRowsAffected,KineticarResult-method](#), [dbGetStatement,KineticarResult-method](#), [dbHasCompleted,KineticarResult-method](#), [dbIsValid](#), [show,KineticarResult-method](#)

dbColumnInfo

dbColumnInfo()

Description

- Provides data.frame as a collection of column names and data types from the result set
- Provides data.frame as a collection of column names and data types from the result set

Usage

```
dbColumnInfo(res, ...)

## S4 method for signature 'KineticaResult'
dbColumnInfo(res, ...)
```

Arguments

res	An object inheriting from [KineticaResult-class]
...	Other parameters passed on to methods.
res	An object inheriting from [KineticaResult-class]
...	Other parameters passed on to methods.

See Also

Other KineticaResult methods: [dbBind,KineticaResult-method](#), [dbClearResult,KineticaResult-method](#), [dbFetch](#), [dbGetInfo](#), [dbGetRowCount,KineticaResult-method](#), [dbGetRowsAffected,KineticaResult-method](#), [dbGetStatement,KineticaResult-method](#), [dbHasCompleted,KineticaResult-method](#), [dbIsValid](#), [show,KineticaDriver-method](#)

Other KineticaResult methods: [dbBind,KineticaResult-method](#), [dbClearResult,KineticaResult-method](#), [dbFetch](#), [dbGetInfo](#), [dbGetRowCount,KineticaResult-method](#), [dbGetRowsAffected,KineticaResult-method](#), [dbGetStatement,KineticaResult-method](#), [dbHasCompleted,KineticaResult-method](#), [dbIsValid](#), [show,KineticaDriver-method](#)

```
dbConnect,KineticaDriver-method
      dbConnect()
```

Description

Connect to a Kinetica DB going through the appropriate authentication procedure. You can have multiple connections open and connections can have multiple results attached. This function may be invoked repeatedly assigning its output to different objects. Authentication can be provided by using username/password variables. row_limit param would limit the number of rows in query results, it's an integer value allowing up to 2,147,483,647 rows. Value literal must be followed by L, as in row_limit = 1000000L, also see example below. Use [dbCanConnect()] to check if a connection can be established.

Usage

```
## S4 method for signature 'KineticaDriver'
dbConnect(drv, host = NULL, port = NULL,
  url = NULL, username = NULL, password = NULL, timeout = NULL,
  row_limit = NULL, ha_ring = NULL, ...)
```

Arguments

drv	Kinetica driver object
host	character string for Kinetica DB host address
port	integer value for Kinetica DB port
url	character string for Kinetica DB url (protocol + host + port)
username	character string for Kinetica DB username
password	character string for Kinetica DB password
timeout	integer value for Kinetica DB connection timeout
...	Other arguments omitted in generic signature

See Also

Other KineticaDriver methods: [dbCanConnect,KineticaDriver-method](#), [dbDataType,KineticaDriver-method](#), [dbGetInfo](#), [dbIsValid](#), [dbListConnections,KineticaDriver-method](#), [dbUnloadDriver,KineticaDriver-method](#), [show,KineticaDriver-method](#)

Examples

```
## Not run:
# If you have a Kinetica DB instance running in local docker image,
# the minimum set of parameters to connect is url
dbConnect(Kinetica(), url = "http://localhost:9191")
# You can also use host and port combination
dbConnect(Kinetica(), host = "127.0.0.1", port = 9191)
# Remote instances would also require username and password.
dbConnect(Kinetica(), host = "127.0.0.1", port = 9191,
  username = "username", password = "Pa$$w0rd", row_limit = 1000000L)
con <- dbConnect(Kinetica(), url = "http://localhost:9191")
show(con)
# KineticaConnection
# url: http://localhost:9191
dbDisconnect(con)

## End(Not run)
```

```
dbCreateTable,KineticaConnection-method
  dbCreateTable()
```

Description

Creates a new table

Usage

```
## S4 method for signature 'KineticaConnection'
dbCreateTable(conn, name, fields, ...,
  row.names = NULL, temporary = FALSE)
```

Arguments

conn	an object of [KineticaConnection-class]
name	character string for table name
fields	either a named character vector or a data frame
...	Other parameters passed on to methods.
row.names	Must be 'NULL'.
temporary	logical flag value whether table should be temporary

See Also

Other KineticaConnection methods: [dbAppendTable,KineticaConnection-method](#), [dbDataType,KineticaConnection-method](#), [dbDisconnect,KineticaConnection-method](#), [dbExecute,KineticaConnection,character-method](#), [dbExistsTable,KineticaConnection,character-method](#), [dbGetInfo,KineticaConnection,character-method](#), [dbGetQuery,KineticaConnection,character-method](#), [dbIsValid,KineticaConnection,character-method](#), [dbListFields,KineticaConnection,character-method](#), [dbListObjects,KineticaConnection-method](#), [dbListResults,KineticaConnection-method](#), [dbListTables,KineticaConnection-method](#), [dbReadTable,KineticaConnection-method](#), [dbRemoveTable,KineticaConnection,character-method](#), [dbSendQuery,KineticaConnection,character-method](#), [dbSendStatement,KineticaConnection,character-method](#), [dbWriteTable,KineticaConnection,ANY-method](#), [show,KineticaDriver-method](#), [sqlCreateTable,KineticaConnection-method](#), [transactions](#)

Examples

```
## Not run:
con <- dbConnect(Kinetica(), url = "http://localhost:9191")
dbCreateTable(con, "tableA", data.frame(a = 1))
dbExistsTable(con, "tableA")
# TRUE
dbDisconnect(con)

## End(Not run)
```

dbDataType,KineticaConnection-method
dbDataType()

Description

Redirect to [KineticaDriver-class] dbDataType method for data type mapping of provided object

Usage

```
## S4 method for signature 'KineticaConnection'
dbDataType(dbObj, obj, ...)
```


Arguments

<code>dbObj</code>	an object of [KineticaConnection-class]
<code>obj</code>	generic object
<code>...</code>	Other arguments omitted in generic signature

See Also

Other KineticaConnection methods: [dbAppendTable,KineticaConnection-method](#), [dbCreateTable,KineticaConnection-method](#), [dbDisconnect,KineticaConnection-method](#), [dbExecute,KineticaConnection,character-method](#), [dbExistsTable,KineticaConnection,character-method](#), [dbGetInfo,KineticaConnection,character-method](#), [dbGetQuery,KineticaConnection,character-method](#), [dbIsValid,KineticaConnection,character-method](#), [dbListFields,KineticaConnection,character-method](#), [dbListObjects,KineticaConnection-method](#), [dbListResults,KineticaConnection-method](#), [dbListTables,KineticaConnection-method](#), [dbReadTable,KineticaConnection-method](#), [dbRemoveTable,KineticaConnection,character-method](#), [dbSendQuery,KineticaConnection,character-method](#), [dbSendStatement,KineticaConnection,character-method](#), [dbWriteTable,KineticaConnection,ANY-method](#), [show,KineticaDriver-method](#), [sqlCreateTable,KineticaConnection-method](#), [transactions](#)

<code>dbDataType,KineticaDriver-method</code> <i>dbDataType()</i>
--

Description

Takes an R object or literal and returns a matching SQLtype used when creating Kinetica DB table value to store it

Usage

```
## S4 method for signature 'KineticaDriver'
dbDataType(dbObj, obj, ...)
```

Arguments

<code>dbObj</code>	KineticaDriver object
<code>obj</code>	any data object or literal
<code>...</code>	Other arguments omitted in generic signature

See Also

Other KineticaDriver methods: [dbCanConnect,KineticaDriver-method](#), [dbConnect,KineticaDriver-method](#), [dbGetInfo,KineticaDriver-method](#), [dbIsValid,KineticaDriver-method](#), [dbListConnections,KineticaDriver-method](#), [dbUnloadDriver,KineticaDriver-method](#), [show,KineticaDriver-method](#)

Examples

```
## Not run:
dbDataType(Kinetica(), 1L)
"INTEGER"
dbDataType(Kinetica(), 1)
"DOUBLE"
dbDataType(Kinetica(), "Test string")
"VARCHAR(256)"
dbDataType(Kinetica(), Sys.Date())
"DATE"
dbDataType(Kinetica(), list())
"BINARY"

## End(Not run)
```

dbDisconnect,KineticaConnection-method
<i>dbDisconnect()</i>

Description

Disconnects the current connection, releasing memory from all uncleared result objects

Usage

```
## S4 method for signature 'KineticaConnection'
dbDisconnect(conn, ...)
```

Arguments

conn	an object of [KineticaConnection-class]
...	Other parameters passed on to methods.

See Also

Other KineticaConnection methods: [dbAppendTable,KineticaConnection-method](#), [dbCreateTable,KineticaConnection-method](#), [dbDataType,KineticaConnection-method](#), [dbExecute,KineticaConnection-method](#), [dbExistsTable,KineticaConnection-method](#), [dbGetInfo,KineticaConnection-method](#), [dbGetQuery,KineticaConnection-method](#), [dbIsValid,KineticaConnection-method](#), [dbListFields,KineticaConnection-method](#), [dbListObjects,KineticaConnection-method](#), [dbListResults,KineticaConnection-method](#), [dbListTables,KineticaConnection-method](#), [dbReadTable,KineticaConnection-method](#), [dbRemoveTable,KineticaConnection-method](#), [dbSendQuery,KineticaConnection-method](#), [dbSendStatement,KineticaConnection-method](#), [dbWriteTable,KineticaConnection-method](#), [show,KineticaDriver-method](#), [sqlCreateTable,KineticaConnection-method](#), [transactions](#)

Examples

```
## Not run:
con <- dbConnect(Kinetica(), url = "http://localhost:9191")
dbDisconnect(con)

## End(Not run)
```

dbExecute,KineticaConnection,character-method
dbExecute()

Description

Executes the statement, returning the number of affected rows or objects

Usage

```
## S4 method for signature 'KineticaConnection,character'
dbExecute(conn, statement, ...,
  params = NULL)
```

Arguments

conn	an object of [KineticaConnection-class]
statement	character
...	Other parameters passed on to methods.
params	a set of values

See Also

Other KineticaConnection methods: [dbAppendTable,KineticaConnection-method](#), [dbCreateTable,KineticaConnection-method](#), [dbDataType,KineticaConnection-method](#), [dbDisconnect,KineticaConnection-method](#), [dbExistsTable,KineticaConnection-method](#), [dbGetInfo,KineticaConnection-method](#), [dbGetQuery,KineticaConnection-method](#), [dbIsValid,KineticaConnection-method](#), [dbListFields,KineticaConnection-method](#), [dbListObjects,KineticaConnection-method](#), [dbListResults,KineticaConnection-method](#), [dbListTables,KineticaConnection-method](#), [dbReadTable,KineticaConnection-method](#), [dbRemoveTable,KineticaConnection-method](#), [dbSendQuery,KineticaConnection-method](#), [dbSendStatement,KineticaConnection-method](#), [dbWriteTable,KineticaConnection-method](#), [show,KineticaDriver-method](#), [sqlCreateTable,KineticaConnection-method](#), [transactions](#)

Examples

```
## Not run:
con <- dbConnect(Kinetica(), url = "http://localhost:9191")
dbCreateTable(con, "tableA", data.frame(a = 1))
dbExistsTable(con, "tableA")
# TRUE
dbExecute(con, "DROP TABLE tableA")
```

```
# 1
dbDisconnect(con)

## End(Not run)
```

```
dbExistsTable, KineticaConnection, character-method
dbExistsTable()
```

Description

Checks if the table exists. Provide either table name or collection name, not both Kinetica DB table names are unique, different collections don't allow tables with the same name.

Usage

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

Arguments

<code>conn</code>	an object of [KineticaConnection-class]
<code>name</code>	character string for table or collection name
<code>...</code>	Other parameters passed on to methods.

Value

logical

See Also

Other KineticaConnection methods: [dbAppendTable, KineticaConnection-method](#), [dbCreateTable, KineticaConnection-method](#), [dbDataType, KineticaConnection-method](#), [dbDisconnect, KineticaConnection-method](#), [dbExecute, KineticaConnection-method](#), [dbGetInfo, KineticaConnection-method](#), [dbGetQuery, KineticaConnection, character-method](#), [dbIsValid, KineticaConnection-method](#), [dbListFields, KineticaConnection-method](#), [dbListObjects, KineticaConnection-method](#), [dbListResults, KineticaConnection-method](#), [dbListTables, KineticaConnection-method](#), [dbReadTable, KineticaConnection, ANY-method](#), [dbRemoveTable, KineticaConnection, character-method](#), [dbSendQuery, KineticaConnection, character-method](#), [dbSendStatement, KineticaConnection, character-method](#), [dbWriteTable, KineticaConnection, ANY-method](#), [show, KineticaDriver-method](#), [sqlCreateTable, KineticaConnection-method](#), [transactions](#)

Examples

```
## Not run:
con <- dbConnect(Kinetica(), url = "http://localhost:9191")
dbCreateTable(con, "tableA", data.frame(a = 1))
dbExistsTable(con, "tableA")
# TRUE
dbExecute(con, "DROP TABLE tableA")
```

```
# 1
dbExistsTable(con, "tableA")
# FALSE
dbDisconnect(con)

## End(Not run)
```

dbFetch

dbFetch()

Description

Fetches the provided number of rows from Result. If n is not provided, returns all available records

Fetches the provided number of rows from Result. If n is not provided, returns all available records

Usage

```
dbFetch(res, n = -1, ...)

## S4 method for signature 'KineticaResult'
dbFetch(res, n = -1, ...)
```

Arguments

res	An object inheriting from [KineticaResult-class]
n	maximum number of records to retrieve per fetch. Use 'n = -1' or 'n = Inf' to retrieve all pending records. Some implementations may recognize other special values.
...	Other arguments passed on to methods.
res	An object inheriting from [KineticaResult-class]
n	maximum number of records to retrieve per fetch. Use 'n = -1' or 'n = Inf' to retrieve all pending records. Some implementations may recognize other special values.
...	Other arguments passed on to methods.

See Also

Other KineticaResult methods: [dbBind, KineticaResult-method](#), [dbClearResult, KineticaResult-method](#), [dbColumnInfo](#), [dbGetInfo](#), [dbGetRowCount, KineticaResult-method](#), [dbGetRowsAffected, KineticaResult-method](#), [dbGetStatement, KineticaResult-method](#), [dbHasCompleted, KineticaResult-method](#), [dbIsValid](#), [show, KineticaDriver-method](#)

Other KineticaResult methods: [dbBind, KineticaResult-method](#), [dbClearResult, KineticaResult-method](#), [dbColumnInfo](#), [dbGetInfo](#), [dbGetRowCount, KineticaResult-method](#), [dbGetRowsAffected, KineticaResult-method](#), [dbGetStatement, KineticaResult-method](#), [dbHasCompleted, KineticaResult-method](#), [dbIsValid](#), [show, KineticaDriver-method](#)

dbGetInfo

*dbGetInfo()***Description**

Generic dbGetInfo() implementation.

Retrieves brief KineticaDriver description: dbname, driver version, client version, max number of connections (NA stands for unlimited)

Basic properties of KineticaConnection object provides DB version, primary url, host, port and user-name of the current connection, flag for HA availability, HA ring of secondary urls and maximum row count that can be returned in one query

Provides basic info on KineticaResult object

Usage

```
dbGetInfo(dbObj, ...)
```

```
## S4 method for signature 'KineticaDriver'
dbGetInfo(dbObj, ...)
```

```
## S4 method for signature 'KineticaConnection'
dbGetInfo(dbObj, ...)
```

```
## S4 method for signature 'KineticaResult'
dbGetInfo(dbObj, ...)
```

Arguments

dbObj	An object inheriting from [KineticaObject-class]
...	Other arguments to methods.
dbObj	an object derived of [KineticaDriver-class] type
...	Other arguments omitted in generic signature
dbObj	object [KineticaConnection-class]
...	Other arguments omitted in generic signature
dbObj	[KineticaResult-class]
...	Other parameters passed on to methods.

Value

a named list

See Also

Other KineticaDriver methods: [dbCanConnect,KineticaDriver-method](#), [dbConnect,KineticaDriver-method](#), [dbDataType,KineticaDriver-method](#), [dbIsValid](#), [dbListConnections,KineticaDriver-method](#), [dbUnloadDriver,KineticaDriver-method](#), [show,KineticaDriver-method](#)

Other KineticaConnection methods: [dbAppendTable,KineticaConnection-method](#), [dbCreateTable,KineticaConnection-method](#), [dbDataType,KineticaConnection-method](#), [dbDisconnect,KineticaConnection-method](#), [dbExecute,KineticaConnection-method](#), [dbExistsTable,KineticaConnection,character-method](#), [dbGetQuery,KineticaConnection,character-method](#), [dbIsValid](#), [dbListFields,KineticaConnection,character-method](#), [dbListObjects,KineticaConnection-method](#), [dbListResults,KineticaConnection-method](#), [dbListTables,KineticaConnection-method](#), [dbReadTable,KineticaConnection-method](#), [dbRemoveTable,KineticaConnection,character-method](#), [dbSendQuery,KineticaConnection,character-method](#), [dbSendStatement,KineticaConnection,character-method](#), [dbWriteTable,KineticaConnection,ANY-method](#), [show,KineticaDriver-method](#), [sqlCreateTable,KineticaConnection-method](#), [transactions](#)

Other KineticaResult methods: [dbBind,KineticaResult-method](#), [dbClearResult,KineticaResult-method](#), [dbColumnInfo](#), [dbFetch](#), [dbGetRowCount,KineticaResult-method](#), [dbGetRowsAffected,KineticaResult-method](#), [dbGetStatement,KineticaResult-method](#), [dbHasCompleted,KineticaResult-method](#), [dbIsValid](#), [show,KineticaDriver-method](#)

Examples

```
drv <- Kinetica()
dbGetInfo(drv)
# name
# "KineticaDriver"
# dbname
# "Kinetica"
# driver.version
# "7.0.1.2"
# client.version
# "7.0.1.2"
# max.connections
# NA

## Not run:
con <- dbConnect(d, url = "http://localhost:9191")
# db.version
# "7.0.0.0"
# dbname
# "Kinetica"
# url
# "http://localhost:9191"
# host
# "localhost"
# port
# 9191
# username
# ""

## End(Not run)
```

`dbGetQuery,KineticaConnection,character-method`
dbGetQuery()

Description

Executes the Query and returns the resulting data.frame of n rows (or less) When n is not provided, returns all rows available

Usage

```
## S4 method for signature 'KineticaConnection,character'
dbGetQuery(conn, statement,
  n = -1, ...)
```

Arguments

<code>conn</code>	A [KineticaConnection-class] object
<code>statement</code>	a character string containing SQL.
<code>n</code>	Number of rows to fetch, default -1
<code>...</code>	Other parameters passed on to methods.

See Also

Other KineticaConnection methods: [dbAppendTable,KineticaConnection-method](#), [dbCreateTable,KineticaConnection-method](#), [dbDataType,KineticaConnection-method](#), [dbDisconnect,KineticaConnection-method](#), [dbExecute,KineticaConnection-method](#), [dbExistsTable,KineticaConnection,character-method](#), [dbGetInfo](#), [dbIsValid](#), [dbListFields,KineticaConnection-method](#), [dbListObjects,KineticaConnection-method](#), [dbListResults,KineticaConnection-method](#), [dbListTables,KineticaConnection-method](#), [dbReadTable,KineticaConnection,ANY-method](#), [dbRemoveTable,KineticaConnection,character-method](#), [dbSendQuery,KineticaConnection,character-method](#), [dbSendStatement,KineticaConnection,character-method](#), [dbWriteTable,KineticaConnection,ANY-method](#), [show,KineticaDriver-method](#), [sqlCreateTable,KineticaConnection-method](#), [transactions](#)

Examples

```
## Not run:
con <- dbConnect(Kinetica(), url = "http://localhost:9191")
dbWriteTable(con, "tableA", data.frame(a = 1:40))
dbExistsTable(con, "tableA")
# TRUE
ds <- dbGetQuery(con, "tableA", 3)
show(ds)
  a
1  1
2  2
3  3
dbRemoveTable(con, "tableA")
```



```
dbDisconnect(con)

## End(Not run)
```

```
dbGetRowCount,KineticarResult-method
dbGetRowCount()
```

Description

Returns the number of rows in the returned data set

Usage

```
## S4 method for signature 'KineticarResult'
dbGetRowCount(res, ...)
```

Arguments

<code>res</code>	KineticarResult-class
<code>...</code>	Other parameters passed on to methods.

See Also

Other KineticarResult methods: [dbBind,KineticarResult-method](#), [dbClearResult,KineticarResult-method](#), [dbColumnInfo](#), [dbFetch](#), [dbGetInfo](#), [dbGetRowsAffected,KineticarResult-method](#), [dbGetStatement,KineticarResult-method](#), [dbHasCompleted,KineticarResult-method](#), [dbIsValid](#), [show,KineticarResult-method](#)

```
dbGetRowsAffected,KineticarResult-method
dbGetRowsAffected()
```

Description

Returns the number of rows affected by the executed SQL statement

Usage

```
## S4 method for signature 'KineticarResult'
dbGetRowsAffected(res, ...)
```

Arguments

<code>res</code>	an object of [KineticarResult-class]
<code>...</code>	Other parameters passed on to methods.

See Also

Other KineticaResult methods: [dbBind, KineticaResult-method](#), [dbClearResult, KineticaResult-method](#), [dbColumnInfo, dbFetch, dbGetInfo, dbGetRowCount, KineticaResult-method](#), [dbGetStatement, KineticaResult-method](#), [dbHasCompleted, KineticaResult-method](#), [dbIsValid, show, KineticaDriver-method](#)

`dbGetStatement, KineticaResult-method`
dbGetStatement()

Description

Returns the SQL statement executed to get this result set

Usage

```
## S4 method for signature 'KineticaResult'
dbGetStatement(res, ...)
```

Arguments

<code>res</code>	an object of [KineticaResult-class]
<code>...</code>	Other parameters passed on to methods.

See Also

Other KineticaResult methods: [dbBind, KineticaResult-method](#), [dbClearResult, KineticaResult-method](#), [dbColumnInfo, dbFetch, dbGetInfo, dbGetRowCount, KineticaResult-method](#), [dbGetRowsAffected, KineticaResult-method](#), [dbHasCompleted, KineticaResult-method](#), [dbIsValid, show, KineticaDriver-method](#)

`dbHasCompleted, KineticaResult-method`
dbHasCompleted()

Description

Returns a logical value whether the result has completed

Usage

```
## S4 method for signature 'KineticaResult'
dbHasCompleted(res, ...)
```

Arguments

<code>res</code>	an object of [KineticaResult-class]
<code>...</code>	Other parameters passed on to methods.

See Also

Other KineticaResult methods: [dbBind,KineticaResult-method](#), [dbClearResult,KineticaResult-method](#), [dbColumnInfo](#), [dbFetch](#), [dbGetInfo](#), [dbGetRowCount,KineticaResult-method](#), [dbGetRowsAffected,KineticaResult-method](#), [dbGetStatement,KineticaResult-method](#), [dbIsValid](#), [show,KineticaDriver-method](#)

dbIsReadOnly	<i>dbIsReadOnly()</i>
--------------	-----------------------

Description

Generic dbIsReadOnly() implementation.

Usage

```
dbIsReadOnly(dbObj, ...)  
  
## S4 method for signature 'KineticaObject'  
dbIsReadOnly(dbObj, ...)
```

Arguments

- dbObj An object inheriting from [KineticaObject-class]
- ... Other arguments to methods.

Value

logical

dbIsValid	<i>dbIsValid()</i>
-----------	--------------------

Description

- Generic dbIsValid() implementation.
- Checks if the provided Driver object is valid
- Checks if the connection is valid
- Checks if the KineticaResult object has been cleared

Usage

```
dbIsValid(dbObj, ...)

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

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

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

Arguments

dbObj	An object inheriting from [KineticaObject-class], i.e. [KineticaDriver-class], [KineticaConnection-class], or a [KineticaResult-class]
...	Other arguments to methods.
dbObj	an object of [KineticaDriver-class] type
...	Other arguments omitted in generic signature
dbObj	A [KineticaConnection-class] object
...	Other arguments omitted in generic signature
dbObj	[KineticaResult-class]
...	Other parameters passed on to methods.

Details

RKinetica Connection is a configuration of url, username and password to establish connection to Kinetica DB, configuration does not go stale when memory objects get swapped to file. Thus RKinetica accepts stale connections as valid, and allows multiple results per connection.

Value

logical

See Also

Other KineticaDriver methods: [dbCanConnect](#), [KineticaDriver-method](#), [dbConnect](#), [KineticaDriver-method](#), [dbDataType](#), [KineticaDriver-method](#), [dbGetInfo](#), [dbListConnections](#), [KineticaDriver-method](#), [dbUnloadDriver](#), [KineticaDriver-method](#), [show](#), [KineticaDriver-method](#)

Other KineticaConnection methods: [dbAppendTable](#), [KineticaConnection-method](#), [dbCreateTable](#), [KineticaConnection-method](#), [dbDataType](#), [KineticaConnection-method](#), [dbDisconnect](#), [KineticaConnection-method](#), [dbExecute](#), [KineticaConnection-method](#), [dbExistsTable](#), [KineticaConnection-method](#), [character-method](#), [dbGetInfo](#), [dbGetQuery](#), [KineticaConnection-method](#), [character-method](#), [dbListFields](#), [KineticaConnection-method](#), [character-method](#), [dbListObjects](#), [KineticaConnection-method](#), [dbListResults](#), [KineticaConnection-method](#), [dbListTables](#), [KineticaConnection-method](#), [dbReadTable](#), [KineticaConnection-method](#), [character-method](#), [dbRemoveTable](#), [KineticaConnection-method](#), [character-method](#), [dbSendQuery](#), [KineticaConnection-method](#), [character-method](#), [dbSendStatement](#), [KineticaConnection-method](#), [character-method](#), [dbWriteTable](#), [KineticaConnection-method](#), [ANY-method](#), [show](#), [KineticaDriver-method](#), [sqlCreateTable](#), [KineticaConnection-method](#), [transactions](#)

Other KineticaResult methods: [dbBind,KineticaResult-method](#), [dbClearResult,KineticaResult-method](#), [dbColumnInfo](#), [dbFetch](#), [dbGetInfo](#), [dbGetRowCount,KineticaResult-method](#), [dbGetRowsAffected,KineticaResult-method](#), [dbGetStatement,KineticaResult-method](#), [dbHasCompleted,KineticaResult-method](#), [show,KineticaDriver-method](#)

Examples

```
## Not run:
drv <- Kinetica()
dbIsValid(drv)
# TRUE

## End(Not run)

## Not run:
con <- dbConnect(Kinetica(), url = "http://localhost:9191")
dbIsValid(con)
# TRUE
dbDisconnect(con)

## End(Not run)
```

dbListConnections,KineticaDriver-method
dbListConnections()

Description

Lists all active connections in KineticaDriver's connection pool invoking `show()` on KineticaConnection objects

Usage

```
## S4 method for signature 'KineticaDriver'
dbListConnections(drv, ...)
```

Arguments

<code>drv</code>	an object of [KineticaDriver-class] type
<code>...</code>	Other arguments omitted in generic signature

See Also

Other KineticaDriver methods: [dbCanConnect,KineticaDriver-method](#), [dbConnect,KineticaDriver-method](#), [dbDataType,KineticaDriver-method](#), [dbGetInfo](#), [dbIsValid](#), [dbUnloadDriver,KineticaDriver-method](#), [show,KineticaDriver-method](#)

```
dbListFields, KineticaConnection, character-method
      dbListFields()
```

Description

Lists field names of a given table

Usage

```
## S4 method for signature 'KineticaConnection, character'
dbListFields(conn, name, ...)
```

Arguments

<code>conn</code>	A [KineticaConnection-class] object
<code>name</code>	a character string for table name
<code>...</code>	Other parameters passed on to methods.

See Also

Other KineticaConnection methods: [dbAppendTable, KineticaConnection-method](#), [dbCreateTable, KineticaConnection-method](#), [dbDataType, KineticaConnection-method](#), [dbDisconnect, KineticaConnection-method](#), [dbExecute, KineticaConnection-method](#), [dbExistsTable, KineticaConnection, character-method](#), [dbGetInfo, dbGetQuery, KineticaConnection, character-method](#), [dbIsValid, dbListObjects, KineticaConnection-method](#), [dbListResults, KineticaConnection-method](#), [dbListTables, KineticaConnection-method](#), [dbReadTable, KineticaConnection, ANY-method](#), [dbRemoveTable, KineticaConnection, character-method](#), [dbSendQuery, KineticaConnection, character-method](#), [dbSendStatement, KineticaConnection, character-method](#), [dbWriteTable, KineticaConnection, ANY-method](#), [show, KineticaDriver-method](#), [sqlCreateTable, KineticaConnection-method](#), [transactions](#)

Examples

```
## Not run:
con <- dbConnect(Kinetica(), url = "http://localhost:9191")
dbWriteTable(con, "tableA", data.frame(a = 1:40))
dbExistsTable(con, "tableA")
# TRUE
fields <- dbListFields(con, "tableA")
fields
# "a"
dbRemoveTable(con, "tableA")
dbDisconnect(con)

## End(Not run)
```

```
dbListObjects,KineticaConnection-method
      dbListObjects()
```

Description

Lists database Objects available to the user, including tables, views and collections

Usage

```
## S4 method for signature 'KineticaConnection'
dbListObjects(conn, prefix = NULL, ...)
```

Arguments

conn	A [KineticaConnection-class] object
prefix	character
...	Other parameters passed on to methods.

Value

data.frame

See Also

Other KineticaConnection methods: [dbAppendTable,KineticaConnection-method](#), [dbCreateTable,KineticaConnection-method](#), [dbDataType,KineticaConnection-method](#), [dbDisconnect,KineticaConnection-method](#), [dbExecute,KineticaConnection-method](#), [dbExistsTable,KineticaConnection,character-method](#), [dbGetInfo,KineticaConnection,character-method](#), [dbGetQuery,KineticaConnection,character-method](#), [dbIsValid,KineticaConnection,character-method](#), [dbListFields,KineticaConnection,character-method](#), [dbListResults,KineticaConnection-method](#), [dbListTables,KineticaConnection-method](#), [dbReadTable,KineticaConnection,ANY-method](#), [dbRemoveTable,KineticaConnection,character-method](#), [dbSendQuery,KineticaConnection,character-method](#), [dbSendStatement,KineticaConnection,character-method](#), [dbWriteTable,KineticaConnection,ANY-method](#), [show,KineticaDriver-method](#), [sqlCreateTable,KineticaConnection-method](#), [transactions](#)

```
dbListResults,KineticaConnection-method
      dbListResults()
```

Description

Lists all active results of the current connection

Usage

```
## S4 method for signature 'KineticaConnection'
dbListResults(conn, ...)
```

Arguments

conn an object of [KineticaConnection-class]
... Other parameters passed on to methods.

See Also

Other KineticaConnection methods: [dbAppendTable,KineticaConnection-method](#), [dbCreateTable,KineticaConnection-method](#), [dbDataType,KineticaConnection-method](#), [dbDisconnect,KineticaConnection-method](#), [dbExecute,KineticaConnection-method](#), [dbExistsTable,KineticaConnection,character-method](#), [dbGetInfo,KineticaConnection,character-method](#), [dbGetQuery,KineticaConnection,character-method](#), [dbIsValid,KineticaConnection,character-method](#), [dbListFields,KineticaConnection,character-method](#), [dbListObjects,KineticaConnection-method](#), [dbListTables,KineticaConnection-method](#), [dbReadTable,KineticaConnection,ANY-method](#), [dbRemoveTable,KineticaConnection,character-method](#), [dbSendQuery,KineticaConnection,character-method](#), [dbSendStatement,KineticaConnection,character-method](#), [dbWriteTable,KineticaConnection,ANY-method](#), [show,KineticaDriver-method](#), [sqlCreateTable,KineticaConnection-method](#), [transactions](#)

dbListTables,KineticaConnection-method
<i>dbListTables()</i>

Description

Lists all database tables available to the user

Usage

```
## S4 method for signature 'KineticaConnection'  
dbListTables(conn, name, ...)
```

Arguments

conn an object of [KineticaConnection-class]
name character
... Other arguments omitted in generic signature

See Also

Other KineticaConnection methods: [dbAppendTable,KineticaConnection-method](#), [dbCreateTable,KineticaConnection-method](#), [dbDataType,KineticaConnection-method](#), [dbDisconnect,KineticaConnection-method](#), [dbExecute,KineticaConnection-method](#), [dbExistsTable,KineticaConnection,character-method](#), [dbGetInfo,KineticaConnection,character-method](#), [dbGetQuery,KineticaConnection,character-method](#), [dbIsValid,KineticaConnection,character-method](#), [dbListFields,KineticaConnection,character-method](#), [dbListObjects,KineticaConnection-method](#), [dbListResults,KineticaConnection-method](#), [dbReadTable,KineticaConnection,ANY-method](#), [dbRemoveTable,KineticaConnection,character-method](#), [dbSendQuery,KineticaConnection,character-method](#), [dbSendStatement,KineticaConnection,character-method](#), [dbWriteTable,KineticaConnection,ANY-method](#), [show,KineticaDriver-method](#), [sqlCreateTable,KineticaConnection-method](#), [transactions](#)

dbQuoteIdentifier	<i>dbQuoteIdentifier()</i>
-------------------	----------------------------

Description

Escapes the provided character vector as SQL identifier.

Escapes the provided character vector as SQL identifier.

Escapes the provided character vector as SQL identifier.

Escapes the provided character vector as SQL identifier.

Usage

```
dbQuoteIdentifier(conn, x, ...)
```

```
## S4 method for signature 'KineticaConnection,ANY'
dbQuoteIdentifier(conn, x, ...)
```

```
## S4 method for signature 'KineticaConnection,character'
dbQuoteIdentifier(conn, x, ...)
```

```
## S4 method for signature 'KineticaConnection,SQL'
dbQuoteIdentifier(conn, x, ...)
```

Arguments

conn	object [KineticaConnection-class]
x	a character vector or SQL object
...	Other arguments passed on to methods.
conn	object [KineticaConnection-class]
x	a character vector or SQL object
...	Other arguments passed on to methods.
conn	object [KineticaConnection-class]
x	a character vector or SQL object
...	Other arguments passed on to methods.

dbQuoteLiteral,KineticaConnection-method
dbQuoteLiteral()

Description

Escapes a literal if necessary.

Usage

```
## S4 method for signature 'KineticaConnection'
dbQuoteLiteral(conn, x, ...)
```

Arguments

conn	A subclass of [KineticaConnection-class]
x	A vector to quote as string.
...	Other arguments passed on to methods.

dbQuoteString	<i>dbQuoteString()</i>
---------------	------------------------

Description

Escapes a character (string) value.

Escapes a character (string) value.

Escapes a character (string) value.

Escapes a character (string) value.

Usage

```
dbQuoteString(conn, x, ...)
```

```
## S4 method for signature 'KineticaConnection,ANY'
dbQuoteString(conn, x, ...)
```

```
## S4 method for signature 'KineticaConnection,character'
dbQuoteString(conn, x, ...)
```

```
## S4 method for signature 'KineticaConnection,SQL'
dbQuoteString(conn, x, ...)
```

Arguments

<code>conn</code>	A subclass of [KineticaConnection-class], representing an active connection to an DBMS.
<code>x</code>	A character vector to quote as string.
<code>...</code>	Other arguments passed on to methods.

`dbReadTable,KineticaConnection,ANY-method`
dbReadTable()

Description

Reads the data of a given table into data.frame object, clearing the KineticaResult object upon exit

Usage

```
## S4 method for signature 'KineticaConnection,ANY'
dbReadTable(conn, name, ...,
  row.names = FALSE, check.names = TRUE)
```

Arguments

<code>conn</code>	an object of [KineticaConnection-class]
<code>name</code>	a character string table name
<code>...</code>	Other arguments omitted in generic signature
<code>row.names</code>	a logical flag to create extra row_names column
<code>check.names</code>	a logical flag to check names

See Also

Other KineticaConnection methods: [dbAppendTable,KineticaConnection-method](#), [dbCreateTable,KineticaConnection-method](#), [dbDataType,KineticaConnection-method](#), [dbDisconnect,KineticaConnection-method](#), [dbExecute,KineticaConnection-method](#), [dbExistsTable,KineticaConnection,character-method](#), [dbGetInfo,KineticaConnection,character-method](#), [dbIsValid,KineticaConnection,character-method](#), [dbListFields,KineticaConnection,character-method](#), [dbListObjects,KineticaConnection-method](#), [dbListResults,KineticaConnection-method](#), [dbListTables,KineticaConnection-method](#), [dbRemoveTable,KineticaConnection-method](#), [dbSendQuery,KineticaConnection,character-method](#), [dbSendStatement,KineticaConnection,character-method](#), [dbWriteTable,KineticaConnection,ANY-method](#), [show,KineticaDriver-method](#), [sqlCreateTable,KineticaConnection-method](#), [transactions](#)

`dbRemoveTable,KineticaConnection,character-method`
dbRemoveTable()

Description

Drops the table with the given name if one exists

Usage

```
## S4 method for signature 'KineticaConnection,character'
dbRemoveTable(conn, name, ...)
```

Arguments

<code>conn</code>	an object of [KineticaConnection-class]
<code>name</code>	character string for table name
<code>...</code>	Other arguments omitted in generic signature

See Also

Other KineticaConnection methods: [dbAppendTable,KineticaConnection-method](#), [dbCreateTable,KineticaConnection-method](#), [dbDataType,KineticaConnection-method](#), [dbDisconnect,KineticaConnection-method](#), [dbExecute,KineticaConnection-method](#), [dbExistsTable,KineticaConnection,character-method](#), [dbGetInfo,KineticaConnection-method](#), [dbGetQuery,KineticaConnection,character-method](#), [dbIsValid,KineticaConnection,character-method](#), [dbListFields,KineticaConnection,character-method](#), [dbListObjects,KineticaConnection-method](#), [dbListResults,KineticaConnection-method](#), [dbListTables,KineticaConnection-method](#), [dbReadTable,KineticaConnection-method](#), [dbSendQuery,KineticaConnection,character-method](#), [dbSendStatement,KineticaConnection,character-method](#), [dbWriteTable,KineticaConnection,ANY-method](#), [show,KineticaDriver-method](#), [sqlCreateTable,KineticaConnection-method](#), [transactions](#)

`dbSendQuery,KineticaConnection,character-method`
dbSendQuery()

Description

Executes SQL query and returns a result set. The returned result object should be read with `dbFetch(result)` and then cleared with `dbClearResult(result)`

Usage

```
## S4 method for signature 'KineticaConnection,character'
dbSendQuery(conn, statement,
  params = NULL, offset = NULL, limit = NULL, ...)
```

Arguments

conn	object [KineticaConnection-class]
statement	character
params	a list of query named parameters
...	Other arguments omitted in generic signature

See Also

Other KineticaConnection methods: [dbAppendTable,KineticaConnection-method](#), [dbCreateTable,KineticaConnection-method](#), [dbDataType,KineticaConnection-method](#), [dbDisconnect,KineticaConnection-method](#), [dbExecute,KineticaConnection-method](#), [dbExistsTable,KineticaConnection,character-method](#), [dbGetInfo,KineticaConnection,character-method](#), [dbGetQuery,KineticaConnection,character-method](#), [dbIsValid,KineticaConnection,character-method](#), [dbListFields,KineticaConnection,character-method](#), [dbListObjects,KineticaConnection-method](#), [dbListResults,KineticaConnection-method](#), [dbListTables,KineticaConnection-method](#), [dbReadTable,KineticaConnection-method](#), [dbRemoveTable,KineticaConnection,character-method](#), [dbSendStatement,KineticaConnection,character-method](#), [dbWriteTable,KineticaConnection,ANY-method](#), [show,KineticaDriver-method](#), [sqlCreateTable,KineticaConnection-method](#), [transactions](#)

dbSendStatement,KineticaConnection,character-method
dbSendStatement()

Description

Executes SQL statement that does not return a result set

Usage

```
## S4 method for signature 'KineticaConnection,character'
dbSendStatement(conn, statement,
  params = NULL, offset = NULL, limit = NULL, ...)
```

Arguments

conn	object [KineticaConnection-class]
statement	character
params	a list of query named parameters
...	Other arguments omitted in generic signature

See Also

[[dbSendQuery\(\)](#)] [[dbGetQuery\(\)](#)] [[dbExecute\(\)](#)]

Other KineticaConnection methods: [dbAppendTable,KineticaConnection-method](#), [dbCreateTable,KineticaConnection-method](#), [dbDataType,KineticaConnection-method](#), [dbDisconnect,KineticaConnection-method](#), [dbExecute,KineticaConnection-method](#), [dbExistsTable,KineticaConnection,character-method](#), [dbGetInfo,KineticaConnection,character-method](#), [dbGetQuery,KineticaConnection,character-method](#), [dbIsValid,KineticaConnection,character-method](#), [dbListFields,KineticaConnection,character-method](#), [dbListObjects,KineticaConnection-method](#), [dbListResults,KineticaConnection-method](#), [dbListTables,KineticaConnection-method](#), [dbReadTable,KineticaConnection-method](#), [dbRemoveTable,KineticaConnection,character-method](#), [dbSendStatement,KineticaConnection,character-method](#), [dbWriteTable,KineticaConnection,ANY-method](#), [show,KineticaDriver-method](#), [sqlCreateTable,KineticaConnection-method](#), [transactions](#)

dbListResults,KineticaConnection-method , dbListTables,KineticaConnection-method , dbReadTable,KineticaConnection-method , dbRemoveTable,KineticaConnection,character-method , dbSendQuery,KineticaConnection,character-method , dbWriteTable,KineticaConnection,ANY-method , show,KineticaDriver-method , sqlCreateTable,KineticaConnection-method , transactions
<hr/>
dbUnloadDriver,KineticaDriver-method <i>dbUnloadDriver()</i>
<hr/>

Description

Unload RKinetica Driver, releasing memory from Driver connections and embedded results

Usage

```
## S4 method for signature 'KineticaDriver'
dbUnloadDriver(drv, ...)
```

Arguments

drv	Kinetica driver object
...	Other arguments omitted in generic signature

See Also

Other KineticaDriver methods: [dbCanConnect,KineticaDriver-method](#), [dbConnect,KineticaDriver-method](#), [dbDataType,KineticaDriver-method](#), [dbGetInfo](#), [dbIsValid](#), [dbListConnections,KineticaDriver-method](#), [show,KineticaDriver-method](#)

dbUnquoteIdentifier	<i>dbUnquoteIdentifier()</i>
-------------------------------------	------------------------------

Description

- Unescapes the DB identifier.
- Unescapes the DB identifier.
- Unescapes the DB identifier.

Usage

```
dbUnquoteIdentifier(conn, x, ...)

## S4 method for signature 'KineticaConnection,SQL'
dbUnquoteIdentifier(conn, x, ...)

## S4 method for signature 'KineticaConnection,ANY'
dbUnquoteIdentifier(conn, x, ...)
```

Arguments

conn	object [KineticaConnection-class]
x	a character vector or SQL object
...	Other arguments passed on to methods.
conn	A subclass of [KineticaConnection-class], representing an active connection to an DBMS.
conn	A subclass of [KineticaConnection-class], representing an active connection to an DBMS.

dbWriteTable,KineticaConnection,ANY-method
dbWriteTable()

Description

Writes a dataset into Kinetica DB, appending, creating or overwriting a table as indicated by flags.

Usage

```
## S4 method for signature 'KineticaConnection,ANY'
dbWriteTable(conn, name, value, ...,
  row.names = FALSE, overwrite = FALSE, append = FALSE,
  field.types = NULL, temporary = FALSE)
```

Arguments

conn	an object of [KineticaConnection-class]
name	character string for table name
value	a [data.frame] (or object coercible to data.frame)
...	Other arguments omitted in generic signature
row.names	a logical flag, NULL or character value to create extra row_names column
overwrite	a logical flag to overwrite existing table with new columns and values
append	a logical flag to preserve existing data and append new records
field.types	a named character vector of value field names and types
temporary	a logical flag to create table as temporary storage

See Also

[dbCreateTable()] [dbAppendTable()] [dbRemoveTable()]
Other KineticaConnection methods: dbAppendTable, KineticaConnection-method, dbCreateTable, KineticaConnection-method, dbDataType, KineticaConnection-method, dbDisconnect, KineticaConnection-method, dbExecute, KineticaConnection-method, dbExistsTable, KineticaConnection, character-method, dbGetInfo, dbGetQuery, KineticaConnection, character-method, dbIsValid, dbListFields, KineticaConnection, character-method, dbListObjects, KineticaConnection-method, dbListResults, KineticaConnection-method, dbListTables, KineticaConnection-method, dbReadTable, KineticaConnection-method, dbRemoveTable, KineticaConnection, character-method, dbSendQuery, KineticaConnection, character-method, dbSendStatement, KineticaConnection, character-method, show, KineticaDriver-method, sqlCreateTable, KineticaConnection-method, transactions

Examples

```
## Not run:  
con <- dbConnect(Kinetica(), url = "http://localhost:9191")  
dbWriteTable(con, "test", data.frame(a = 1L:3L, b = 2.1:4.2), row.names = FALSE)  
dbDisconnect(con)  
  
## End(Not run)
```

KineticaObject-class	Class KineticaObject
----------------------	----------------------

Description

Base DB object extending [DBI::DBIObject].

RKinetica	RKinetica
-----------	-----------

Description

RKinetica is an R package providing access to Kinetica DB through REST interface. Kinetica DB is a distributed, in-memory, GPU-accelerated database that utilizes a powerful combination of CPUs and GPUs to analyze massive, complex datasets with millisecond response times.

Details

At the core of Kinetica is a vectorized, columnar, memory-first database designed for analytical (OLAP) workloads. Kinetica automatically distributes any workload across CPUs and GPUs for optimal results.

For more information on Kinetica DB please visit our web site <http://www.kinetica.com>

```
show,KineticaDriver-method
    show()
```

Description

RKinetica Driver short printout string

Minimal KineticaConnection string representation Provides url of the Kinetica DB instance

Brief string printout of [KineticaResult-class] object properties

Usage

```
## S4 method for signature 'KineticaDriver'
show(object)

## S4 method for signature 'KineticaConnection'
show(object)

## S4 method for signature 'KineticaResult'
show(object)
```

Arguments

object	[KineticaConnection-class]
object	[KineticaResult-class]

See Also

Other KineticaDriver methods: [dbCanConnect,KineticaDriver-method](#), [dbConnect,KineticaDriver-method](#), [dbDataType,KineticaDriver-method](#), [dbGetInfo](#), [dbIsValid](#), [dbListConnections,KineticaDriver-method](#), [dbUnloadDriver,KineticaDriver-method](#)

Other KineticaConnection methods: [dbAppendTable,KineticaConnection-method](#), [dbCreateTable,KineticaConnection-method](#), [dbDataType,KineticaConnection-method](#), [dbDisconnect,KineticaConnection-method](#), [dbExecute,KineticaConnection-method](#), [dbExistsTable,KineticaConnection-method](#), [dbGetInfo,KineticaConnection-method](#), [dbGetQuery,KineticaConnection-method](#), [dbIsValid,KineticaConnection-method](#), [dbListFields,KineticaConnection-method](#), [dbListObjects,KineticaConnection-method](#), [dbListResults,KineticaConnection-method](#), [dbListTables,KineticaConnection-method](#), [dbReadTable,KineticaConnection-method](#), [dbRemoveTable,KineticaConnection-method](#), [dbSendQuery,KineticaConnection-method](#), [dbSendStatement,KineticaConnection-method](#), [dbWriteTable,KineticaConnection-method](#), [sqlCreateTable,KineticaConnection-method](#), [transactions](#)

Other KineticaResult methods: [dbBind,KineticaResult-method](#), [dbClearResult,KineticaResult-method](#), [dbColumnInfo,KineticaResult-method](#), [dbFetch,KineticaResult-method](#), [dbGetInfo,KineticaResult-method](#), [dbGetRowCount,KineticaResult-method](#), [dbGetRowsAffected,KineticaResult-method](#), [dbGetStatement,KineticaResult-method](#), [dbHasCompleted,KineticaResult-method](#), [dbIsValid](#)

Examples

```
## Not run:
drv <- Kinetica()
show(drv)
# KineticaDriver 7.0.1.2

## End(Not run)
## Not run:
con <- dbConnect(d, url = "http://localhost:9191")
show(con)
<KineticaConnection>
  url: http://localhost:9191

## End(Not run)
```

show, SQL-method	<i>show()</i>
------------------	---------------

Description

prints escaped SQL values.

Usage

```
## S4 method for signature 'SQL'
show(object)
```

Arguments

object SQL object

SQL	<i>SQL()</i>
-----	--------------

Description

Creates an escaped SQL representation of provided named character vector.

Usage

```
SQL(x, ..., names = NULL)
```

Arguments

x A character vector to label as being escaped SQL.
... Other arguments passed on to methods. Not otherwise used.
names Names for the returned object, must have the same length as 'x'.

Value

An object of class 'SQL'.

sqlAppendTable	<i>sqlAppendTable</i>
----------------	-----------------------

Description

Compose query to insert rows into a table

Usage

```
sqlAppendTable(con, table, values, row.names = NA, ...)
```

Arguments

con	A database connection.
table	Name of the table. Escaped with [dbQuoteIdentifier()].
values	A data frame. Factors will be converted to character vectors.
row.names	a flag with logical, character or NULL value
...	Other parameters passed on to methods. Character vectors will be escaped with [dbQuoteString()].

Details

'sqlAppendTable()' generates a single SQL string that inserts a data frame into an existing table. 'sqlAppendTableTemplate()' generates a template suitable for use with [dbBind()]. The default methods are ANSI SQL 99 compliant. These methods are mostly useful for backend implementers.

The 'row.names' argument must be passed explicitly in order to avoid a compatibility warning. The default will be changed in a later release.

See Also

Other SQL generation: [sqlAppendTableTemplate](#)

```
sqlAppendTableTemplate
      sqlAppendTableTemplate()
```

Description

Creates a placeholder-based template

Usage

```
sqlAppendTableTemplate(con, table, values, row.names = NA,
  prefix = "?", ..., pattern = "1")
```

Arguments

con	A database connection.
table	Name of the table. Escaped with [dbQuoteIdentifier()].
values	A data frame. Factors will be converted to character vectors.
row.names	a flag with logical, character or NULL value
prefix	Parameter prefix to use for placeholders.
...	Other parameters passed on to methods. Character vectors will be escaped with [dbQuoteString()].
pattern	Parameter pattern to use for placeholders: - """: no pattern - "1": position - anything else: field name

See Also

Other SQL generation: [sqlAppendTable](#)

```
sqlCreateTable,KineticaConnection-method
      sqlCreateTable()
```

Description

Customised version of the generic sqlCreateTable method (Kinetica DB uses TEMP keyword instead of TEMPORARY)

Usage

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

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	a flag with logical, character or NULL value
temporary	logical TRUE/FALSE for temporary/permanent table created
...	Other parameters passed on to methods.

See Also

Other KineticaConnection methods: [dbAppendTable,KineticaConnection-method](#),[dbCreateTable,KineticaConnection-method](#),[dbDataType,KineticaConnection-method](#),[dbDisconnect,KineticaConnection-method](#),[dbExecute,KineticaConnection-method](#),[dbExistsTable,KineticaConnection,character-method](#),[dbGetInfo,KineticaConnection,character-method](#),[dbIsValid,KineticaConnection,character-method](#),[dbListFields,KineticaConnection,character-method](#),[dbListObjects,KineticaConnection-method](#),[dbListResults,KineticaConnection-method](#),[dbListTables,KineticaConnection-method](#),[dbReadTable,KineticaConnection-method](#),[dbRemoveTable,KineticaConnection,character-method](#),[dbSendQuery,KineticaConnection,character-method](#),[dbSendStatement,KineticaConnection,character-method](#),[dbWriteTable,KineticaConnection,ANY-method](#),[show,KineticaDriver-method](#),[transactions](#)

sqlData	<i>sqlData()</i>
---------	------------------

Description

Escapes and encodes SQL data.
Escapes and encodes SQL data.

Usage

```
sqlData(con, value, row.names = NA, ...)

## S4 method for signature 'KineticaConnection'
sqlData(con, value, row.names = NA, ...)
```

Arguments

con	A database connection, object of [KineticaConnection-class]
value	A data frame
row.names	a flag with logical, character or NULL value
...	Other parameters passed on to methods.

con A database connection, object of [KineticaConnection-class]
row.names a flag with logical, character or NULL value
... Other parameters passed on to methods.
value A data frame

Examples

```
## Not run:  
con <- dbConnect(RSQLite::SQLite(), ":memory:")  
  
sqlData(con, head(iris))  
sqlData(con, head(mtcars))  
  
dbDisconnect(con)  
  
## End(Not run)
```

summary	<i>summary()</i>
---------	------------------

Description

Generic summary() implementation.

Usage

```
summary(object, ...)
```

summary,KineticaObject-method
<i>summary()</i>

Description

Implementation of summary() for KineticaObject signature.

Usage

```
## S4 method for signature 'KineticaObject'  
summary(object, ...)
```

Arguments

object An object inheriting from [KineticaObject-class]
... Other arguments to methods.

transactions	<i>dbBegin()</i>
--------------	------------------

Description

Executes the statement, returning the number of affected rows or objects
Executes the statement, returning the number of affected rows or objects
Executes the statement, returning the number of affected rows or objects

Usage

```
## S4 method for signature 'KineticaConnection'  
dbBegin(conn, ...)  
  
## S4 method for signature 'KineticaConnection'  
dbCommit(conn, ...)  
  
## S4 method for signature 'KineticaConnection'  
dbRollback(conn, ...)
```

Arguments

conn	an object of [KineticaConnection-class]
...	Other parameters passed on to methods.
conn	an object of [KineticaConnection-class]
...	Other parameters passed on to methods.
conn	an object of [KineticaConnection-class]
...	Other parameters passed on to methods.

See Also

Other KineticaConnection methods: [dbAppendTable,KineticaConnection-method](#),[dbCreateTable,KineticaConnection-method](#),[dbDataType,KineticaConnection-method](#),[dbDisconnect,KineticaConnection-method](#),[dbExecute,KineticaConnection-method](#),[dbExistsTable,KineticaConnection,character-method](#),[dbGetInfo,KineticaConnection,character-method](#),[dbGetQuery,KineticaConnection,character-method](#),[dbIsValid,KineticaConnection,character-method](#),[dbListFields,KineticaConnection,character-method](#),[dbListObjects,KineticaConnection-method](#),[dbListResults,KineticaConnection-method](#),[dbListTables,KineticaConnection-method](#),[dbReadTable,KineticaConnection-method](#),[dbRemoveTable,KineticaConnection,character-method](#),[dbSendQuery,KineticaConnection,character-method](#),[dbSendStatement,KineticaConnection,character-method](#),[dbWriteTable,KineticaConnection,ANY-method](#),[show,KineticaDriver-method](#),[sqlCreateTable,KineticaConnection-method](#)

Other KineticaConnection methods: [dbAppendTable,KineticaConnection-method](#),[dbCreateTable,KineticaConnection-method](#),[dbDataType,KineticaConnection-method](#),[dbDisconnect,KineticaConnection-method](#),[dbExecute,KineticaConnection-method](#),[dbExistsTable,KineticaConnection,character-method](#),[dbGetInfo,KineticaConnection,character-method](#),[dbGetQuery,KineticaConnection,character-method](#),[dbIsValid,KineticaConnection,character-method](#),[dbListFields,KineticaConnection,character-method](#),[dbListObjects,KineticaConnection-method](#),[dbListResults,KineticaConnection-method](#),[dbListTables,KineticaConnection-method](#),[dbReadTable,KineticaConnection-method](#),[dbRemoveTable,KineticaConnection,character-method](#),[dbSendQuery,KineticaConnection,character-method](#),[dbSendStatement,KineticaConnection,character-method](#),[dbWriteTable,KineticaConnection,ANY-method](#),[show,KineticaDriver-method](#),[sqlCreateTable,KineticaConnection-method](#)

dbSendStatement,KineticaConnection,character-method,dbWriteTable,KineticaConnection,ANY-method,
show,KineticaDriver-method,sqlCreateTable,KineticaConnection-method

Other KineticaConnection methods: dbAppendTable,KineticaConnection-method,dbCreateTable,KineticaConnection-method,dbDataType,KineticaConnection-method,dbDisconnect,KineticaConnection-method,dbExecute,KineticaConnection-method,dbExistsTable,KineticaConnection,character-method,dbGetInfo,dbGetQuery,KineticaConnection,character-method,dbIsValid,dbListFields,KineticaConnection,character-method,dbListObjects,KineticaConnection-method,dbListResults,KineticaConnection-method,dbListTables,KineticaConnection-method,dbReadTable,KineticaConnection-method,dbRemoveTable,KineticaConnection,character-method,dbSendQuery,KineticaConnection,character-method,dbSendStatement,KineticaConnection,character-method,dbWriteTable,KineticaConnection,ANY-method,show,KineticaDriver-method,sqlCreateTable,KineticaConnection-method

Index

*Topic **package**

RKinetica, [32](#)

dbAppendTable, KineticaConnection-method, [3](#)

dbBind, KineticaResult-method, [3](#)

dbCanConnect, KineticaDriver-method, [4](#)

dbClearResult, KineticaResult-method, [5](#)

dbColumnInfo, [4](#), [5](#), [5](#), [13](#), [15](#), [17–19](#), [21](#), [33](#)

dbColumnInfo, KineticaResult-method
(dbColumnInfo), [5](#)

dbCommit, KineticaConnection-method
(transactions), [39](#)

dbConnect, KineticaDriver-method, [6](#)

dbCreateTable, KineticaConnection-method, [7](#)

dbDataType, KineticaConnection-method, [8](#)

dbDataType, KineticaDriver-method, [9](#)

dbDisconnect, KineticaConnection-method, [10](#)

dbExecute, KineticaConnection, character-method, [11](#)

dbExistsTable, KineticaConnection, character-method, [12](#)

dbFetch, [4–6](#), [13](#), [15](#), [17–19](#), [21](#), [33](#)

dbFetch, KineticaResult-method
(dbFetch), [13](#)

dbGetInfo, [3–13](#), [14](#), [16–24](#), [27–30](#), [32](#), [33](#),
[37](#), [39](#), [40](#)

dbGetInfo, KineticaConnection-method
(dbGetInfo), [14](#)

dbGetInfo, KineticaDriver-method
(dbGetInfo), [14](#)

dbGetInfo, KineticaResult-method
(dbGetInfo), [14](#)

dbGetQuery, KineticaConnection, character-method, [16](#)

dbGetRowCount, KineticaResult-method, [17](#)

dbGetRowsAffected, KineticaResult-method, [17](#)

dbGetStatement, KineticaResult-method, [18](#)

dbHasCompleted, KineticaResult-method, [18](#)

dbIsReadOnly, [19](#)

dbIsReadOnly, KineticaObject-method
(dbIsReadOnly), [19](#)

dbIsValid, [3–13](#), [15–19](#), [19](#), [21–24](#), [27–30](#),
[32](#), [33](#), [37](#), [39](#), [40](#)

dbIsValid, KineticaConnection-method
(dbIsValid), [19](#)

dbIsValid, KineticaDriver-method
(dbIsValid), [19](#)

dbIsValid, KineticaResult-method
(dbIsValid), [19](#)

dbListConnections, KineticaDriver-method, [21](#)

dbListFields, KineticaConnection, character-method, [22](#)

dbListObjects, KineticaConnection-method, [23](#)

dbListResults, KineticaConnection-method, [23](#)

dbListTables, KineticaConnection-method, [24](#)

dbQuoteIdentifier, [25](#)

dbQuoteIdentifier, KineticaConnection, ANY-method
(dbQuoteIdentifier), [25](#)

dbQuoteIdentifier, KineticaConnection, character-method
(dbQuoteIdentifier), [25](#)

dbQuoteIdentifier, KineticaConnection, SQL-method
(dbQuoteIdentifier), [25](#)

dbQuoteLiteral, KineticaConnection-method, [26](#)

dbQuoteString, [26](#)

dbQuoteString, KineticaConnection, ANY-method
(dbQuoteString), [26](#)

dbQuoteString,KineticaConnection,character-method,transactions, [3](#), [8–12](#), [15](#), [16](#), [20](#), [22–24](#),
 (dbQuoteString), [26](#) [27–30](#), [32](#), [33](#), [37](#), [39](#)
 dbQuoteString,KineticaConnection,SQL-method
 (dbQuoteString), [26](#)
 dbReadTable,KineticaConnection,ANY-method,
 [27](#)
 dbRemoveTable,KineticaConnection,character-method,
 [28](#)
 dbRollback,KineticaConnection-method
 (transactions), [39](#)
 dbSendQuery,KineticaConnection,character-method,
 [28](#)
 dbSendStatement,KineticaConnection,character-method,
 [29](#)
 dbUnloadDriver,KineticaDriver-method,
 [30](#)
 dbUnquoteIdentifier, [30](#)
 dbUnquoteIdentifier,KineticaConnection,ANY-method
 (dbUnquoteIdentifier), [30](#)
 dbUnquoteIdentifier,KineticaConnection,SQL-method
 (dbUnquoteIdentifier), [30](#)
 dbWriteTable,KineticaConnection,ANY-method,
 [31](#)

 KineticaObject (KineticaObject-class),
 [32](#)
 KineticaObject-class, [32](#)

 RKinetica, [32](#)
 RKinetica-package (RKinetica), [32](#)

 show,KineticaConnection-method
 (show,KineticaDriver-method),
 [33](#)
 show,KineticaDriver-method, [33](#)
 show,KineticaResult-method
 (show,KineticaDriver-method),
 [33](#)
 show,SQL-method, [34](#)
 SQL, [34](#)
 sqlAppendTable, [35](#), [36](#)
 sqlAppendTableTemplate, [35](#), [36](#)
 sqlCreateTable,KineticaConnection-method,
 [36](#)
 sqlData, [37](#)
 sqlData,KineticaConnection-method
 (sqlData), [37](#)
 summary, [38](#)
 summary,KineticaObject-method, [38](#)