

Package ‘influxdbclient’

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Title InfluxDB 2.x Client for R

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Description InfluxDB 2.x time-series database client. Supports both InfluxDB OSS (<<https://portal.influxdata.com/downloads/>>) and Cloud (<<https://cloud2.influxdata.com/>>) version.

URL <https://github.com/influxdata/influxdb-client-r>

BugReports <https://github.com/influxdata/influxdb-client-r/issues>

Depends R (>= 3.3)

Encoding UTF-8

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Imports R6, httr, jsonlite, bit64, nanotime (>= 0.3.0), plyr

RoxygenNote 7.1.1

Suggests testthat, httptest

NeedsCompilation no

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InfluxDBClient

InfluxDBClient

Description

Client for querying from and writing to InfluxDB 2.x.

Format

An R6Class object

Public fields

url Database URL

token Authentication token

org Organization name

dialect Flux dialect

retryOptions Retry options

Methods

Public methods:

- [InfluxDBClient\\$new\(\)](#)
- [InfluxDBClient\\$health\(\)](#)
- [InfluxDBClient\\$query\(\)](#)
- [InfluxDBClient\\$ready\(\)](#)
- [InfluxDBClient\\$write\(\)](#)
- [InfluxDBClient\\$clone\(\)](#)

Method `new()`: Creates instance of InfluxDBClient.

Usage:

```
InfluxDBClient$new(url, token, org, retryOptions = NULL)
```

Arguments:

url InfluxDB instance URL

token Authentication token

org Organization name

org Retry options. See RetryOptions for details. Set to TRUE for default retry options. Default is NULL which disables retries.

Method `health()`: Gets health info of the InfluxDB instance.

Usage:

```
InfluxDBClient$health()
```

Returns: Named list with name, message, status, version, commit elements or error

Method `query()`: Queries data in the InfluxDB instance.

Usage:

```
InfluxDBClient$query(
  text,
  POSIXctCol = c(`_time` = "time"),
  flatSingleResult = TRUE
)
```

Arguments:

`text` Flux query

`POSIXctCol` Flux time to (new) POSIXct column mapping (named list). Default is `c("_time"="time")`. Use NULL to skip it.

`flatSingleResult` Whether to return simple list when response contains only one result. Default is TRUE.

Returns: List of data frames. Data frame represents Flux table. It can be a named list of nested lists of data frames when query response contains multiple results (see Flux `yield`), or a simple list of data frames for single result response.

Method `ready()`: Gets readiness status of the InfluxDB instance.

Usage:

```
InfluxDBClient$ready()
```

Returns: Named list with status, started and up elements or error

Method `write()`: Writes data to the InfluxDB instance.

Usage:

```
InfluxDBClient$write(
  x,
  bucket,
  batchSize = 5000,
  precision = c("ns", "us", "ms", "s"),
  measurementCol = "_measurement",
  tagCols = NULL,
  fieldCols = c(`_field` = "_value"),
  timeCol = "_time",
  object = NULL,
  ...
)
```

Arguments:

`x` Data as (list of) `data.frame`

`bucket` Target bucket name

`batchSize` Batch size. Positive number or FALSE to disable. Default is 5000.

`precision` Time precision

`measurementCol` Name of measurement column. Default is "_measurement".

`tagCols` Names of tag (index) columns

fieldCols Names of field columns. In case of unpivoted data previously retrieved from InfluxDB, use default value ie. named list `c("_field"="_value")`. For all other cases, just use simple vector of column names (see Examples).

timeCol Name of time column. The column values should be either of nanotime or POSIXct type. Default is `"_time"`.

object *Output object name. For dry-run operation, specify the name of the object to receive the output. Default is NULL. For debugging purposes.*

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
InfluxDBClient$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Examples

```
## Not run:
# Instantiation
client <- InfluxDBClient$new(url = "http://localhost:8086",
                             token = "my-token",
                             org = "my-org")

# Query
data <- client$query('from(bucket: "my-bucket") |> range(start: -1h)')

# Write
data <- data.frame(...)
client$write(data, bucket = "my-bucket", precision = "us",
             measurementCol = "name",
             tagCols = c("location", "id"),
             fieldCols = c("altitude", "temperature"),
             timeCol = "time")

# Ready status
ready <- client$ready()

# Health info
ready <- client$health()

## End(Not run)
```

RetryOptions

RetryOptions

Description

Retry options may be specified as optional argument to write.

Format

An R6Class object

Public fields

retryJitter Maximum number of random milliseconds included in delay. Default is 0.

retryInterval First retry delay in seconds. Default is 5.

maxDelay Maximum delay between retries in seconds. Default is 125.

maxRetryTime Maximum time to spend retrying in seconds. Default is 180.

maxAttempts Number of retry attempts. Default is 5.

exponentialBase Base for exponential backoff strategy. Default is 2.

Methods**Public methods:**

- [RetryOptions\\$new\(\)](#)
- [RetryOptions\\$clone\(\)](#)

Method `new()`: Creates instance of `RetryOptions`.

Usage:

```
RetryOptions$new(  
  retryJitter = 0,  
  retryInterval = 5,  
  maxDelay = 125,  
  maxRetryTime = 180,  
  maxAttempts = 5,  
  exponentialBase = 2,  
  ...  
)
```

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
RetryOptions$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

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