

# Package ‘influxdbclient’

July 21, 2021

**Title** InfluxDB 2.x Client for R

**Version** 0.1.0

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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, httpptest

**NeedsCompilation** no

**Repository** CRAN

**Date/Publication** 2021-07-21 09:30:05 UTC

## R topics documented:

InfluxDBClient . . . . .	2
RetryOptions . . . . .	4
<b>Index</b>	<b>6</b>

InfluxDBClient

*InfluxDBClient*

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**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)
```

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RetryOptions

*RetryOptions*

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## 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.

# Index

InfluxDBClient, [2](#)

RetryOptions, [4](#)