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**influxdb***client*

***Release 0.0.1***

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- *Query*
- *Write*
  - *Batching*
  - *Asynchronous client*
  - *Synchronous client*
  - *How to efficiently import large dataset*
- *Gzip support*
- *Debugging*

## 1.1 Query

```
from influxdb_client import InfluxDBClient, Point
from influxdb_client.client.write_api import SYNCHRONOUS

bucket = "my-bucket"

client = InfluxDBClient(url="http://localhost:9999", token="my-token", org="my-org")

write_api = client.write_api(write_options=SYNCHRONOUS)
query_api = client.query_api()

p = Point("my_measurement").tag("location", "Prague").field("temperature", 25.3)

write_api.write(bucket=bucket, org="my-org", record=p)
```

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```

## using Table structure
tables = query_api.query('from(bucket:"my-bucket") |> range(start: -10m)')

for table in tables:
    print(table)
    for row in table.records:
        print(row.values)

## using csv library
csv_result = query_api.query_csv('from(bucket:"my-bucket") |> range(start: -10m)')
val_count = 0
for row in csv_result:
    for cell in row:
        val_count += 1

```

## 1.2 Write

The `WriteApi` supports synchronous, asynchronous and batching writes into InfluxDB 2.0. The data should be passed as an InfluxDB Line Protocol, Data Point or Observable stream.

*The default instance of “WriteApi” use batching.*

### 1.2.1 Batching

The batching is configurable by `write_options`:

Property	Description	Default Value
<code>batch_size</code>	the number of data points to collect in a batch	1000
<code>flush_interval</code>	the number of milliseconds before the batch is written	1000
<code>jitter_interval</code>	the number of milliseconds to increase the batch flush interval by a random amount	0
<code>retry_interval</code>	the number of milliseconds to retry unsuccessful write. The retry interval is used when the InfluxDB server does not specify “Retry-After” header.	1000

```

import rx
from rx import operators as ops

from influxdb_client import InfluxDBClient, Point, WriteOptions
from influxdb_client.client.write_api import SYNCHRONOUS

_client = InfluxDBClient(url="http://localhost:9999", token="my-token", org="my-org")
_write_client = _client.write_api(write_options=WriteOptions(batch_size=500,
                                                            flush_interval=10_000,
                                                            jitter_interval=2_000,
                                                            retry_interval=5_000))

"""
Write Line Protocol
"""

```

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```

_write_client.write("my-bucket", "my-org", "h2o_feet,location=coyote_creek water_
↳level=1.0 1")
_write_client.write("my-bucket", "my-org", ["h2o_feet,location=coyote_creek water_
↳level=2.0 2",
                                          "h2o_feet,location=coyote_creek water_
↳level=3.0 3"])

"""
Write Data Point
"""
_write_client.write("my-bucket", "my-org", Point("h2o_feet").tag("location", "coyote_
↳creek").field("water_level", 4.0).time(4))
_write_client.write("my-bucket", "my-org", [Point("h2o_feet").tag("location", "coyote_
↳creek").field("water_level", 5.0).time(5),
                                          Point("h2o_feet").tag("location", "coyote_
↳creek").field("water_level", 6.0).time(6)])

"""
Write Observable stream
"""
_data = rx \
    .range(7, 11) \
    .pipe(ops.map(lambda i: "h2o_feet,location=coyote_creek water_level={0}.0 {0}".
↳format(i)))

_write_client.write("my-bucket", "my-org", _data)

"""
Close client
"""
_write_client.__del__()
_client.__del__()

```

## 1.2.2 Asynchronous client

Data are writes in an asynchronous HTTP request.

```

from influxdb_client import InfluxDBClient
from influxdb_client.client.write_api import ASYNCHRONOUS

client = InfluxDBClient(url="http://localhost:9999", token="my-token", org="my-org")
write_client = client.write_api(write_options=ASYNCHRONOUS)

...

client.__del__()

```

## 1.2.3 Synchronous client

Data are writes in a synchronous HTTP request.

```

from influxdb_client import InfluxDBClient
from influxdb_client.client.write_api import SYNCHRONOUS

client = InfluxDBClient(url="http://localhost:9999", token="my-token", org="my-org")
write_client = client.write_api(write_options=SYNCHRONOUS)

...

client.__del__()

```

## 1.2.4 How to efficiently import large dataset

- sources - import\_data\_set.py

```

"""
Import VIX - CBOE Volatility Index - from "vix-daily.csv" file into InfluxDB 2.0

https://datahub.io/core/finance-vix#data
"""

from collections import OrderedDict
from csv import DictReader
from datetime import datetime

import rx
from rx import operators as ops

from influxdb_client import InfluxDBClient, Point, WriteOptions

def parse_row(row: OrderedDict):
    """Parse row of CSV file into Point with structure:

        financial-analysis,type=ily close=18.47,high=19.82,low=18.28,open=19.82_
↪1198195200000000000

    CSV format:
        Date,VIX Open,VIX High,VIX Low,VIX Close\n
        2004-01-02,17.96,18.68,17.54,18.22\n
        2004-01-05,18.45,18.49,17.44,17.49\n
        2004-01-06,17.66,17.67,16.19,16.73\n
        2004-01-07,16.72,16.75,15.5,15.5\n
        2004-01-08,15.42,15.68,15.32,15.61\n
        2004-01-09,16.15,16.88,15.57,16.75\n
        ...

    :param row: the row of CSV file
    :return: Parsed csv row to [Point]
    """
    return Point("financial-analysis") \
        .tag("type", "vix-daily") \
        .field("open", float(row['VIX Open'])) \
        .field("high", float(row['VIX High'])) \
        .field("low", float(row['VIX Low'])) \
        .field("close", float(row['VIX Close'])) \
        .time(datetime.strptime(row['Date'], '%Y-%m-%d'))

```

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```

"""
Converts vix-daily.csv into sequence of datad point
"""
data = rx \
    .from_iterable(DictReader(open('vix-daily.csv', 'r'))) \
    .pipe(ops.map(lambda row: parse_row(row)))

client = InfluxDBClient(url="http://localhost:9999", token="my-token", org="my-org",
    ↪ debug=True)

"""
Create client that writes data in batches with 500 items.
"""
write_api = client.write_api(write_options=WriteOptions(batch_size=500, jitter_
    ↪ interval=1_000))

"""
Write data into InfluxDB
"""
write_api.write(org="my-org", bucket="my-bucket", record=data)
write_api.__del__()

"""
Querying max value of CBOE Volatility Index
"""
query = 'from(bucket:"my-bucket")' \
    ' |> range(start: 0, stop: now())' \
    ' |> filter(fn: (r) => r._measurement == "financial-analysis")' \
    ' |> max()'
result = client.query_api().query(org="my-org", query=query)

"""
Processing results
"""
print()
print("=== results ===")
print()
for table in result:
    for record in table.records:
        print('max {0:5} = {1}'.format(record.get_field(), record.get_value()))

"""
Close client
"""
client.__del__()

```

### 1.3 Gzip support

InfluxDBClient does not enable gzip compression for http requests by default. If you want to enable gzip to reduce transfer data's size, you can call:

```
from influxdb_client import InfluxDBClient
```

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```
_db_client = InfluxDBClient(url="http://localhost:9999", token="my-token", org="my-org", enable_gzip=True)
```

## 1.4 Debugging

For debug purpose you can enable verbose logging of http requests. Both request header and body will be logged to standard output.

```
_client = InfluxDBClient(url="http://localhost:9999", token="my-token", debug=True, org="my-org")
```

- *InfluxDBClient*
- *QueryApi*
- *WriteApi*
- *BucketsApi*
- *LabelsApi*
- *OrganizationsApi*
- *UsersApi*
- *TasksApi*

## 2.1 InfluxDBClient

**class** `influxdb_client.InfluxDBClient` (*url*, *token*, *debug=None*, *timeout=10000*, *enable\_gzip=False*, *org: str = None*)  
*influxdb\_client.InfluxDBClient* is client for HTTP API defined in <https://github.com/influxdata/influxdb/blob/master/http/swagger.yml>.

### Parameters

- **url** – InfluxDB server API url (ex. <http://localhost:9999>).
- **token** – auth token
- **debug** – enable verbose logging of http requests
- **timeout** – default http client timeout
- **enable\_gzip** – Enable Gzip compression for http requests. Currently only the “Write” and “Query” endpoints supports the Gzip compression.

- **org** – organization name (used as a default in query and write API)

**authorizations\_api** () → influxdb\_client.authorizations\_api.AuthorizationsApi  
Creates the Authorizations API instance.

**Returns** authorizations api

**buckets\_api** () → influxdb\_client.bucket\_api.BucketsApi  
Creates the Bucket API instance.

**Returns** buckets api

**close** ()  
Shut downs the client

**health** () → influxdb\_client.domain.health\_check.HealthCheck  
Get the health of an instance.

**Returns** HealthCheck

**labels\_api** () → influxdb\_client.labels\_api.LabelsApi  
Creates the Labels API instance.

**Returns** labels api

**organizations\_api** () → influxdb\_client.organizations\_api.OrganizationsApi  
Creates the Organizations API instance.

**Returns** organizations api

**query\_api** () → influxdb\_client.query\_api.QueryApi  
Creates a Query API instance

**Returns** Query api instance

**ready** () → influxdb\_client.domain.ready.Ready  
Gets The readiness of the InfluxDB 2.0.

**Returns** Ready

**tasks\_api** () → influxdb\_client.tasks\_api.TasksApi  
Creates the Tasks API instance.

**Returns** tasks api

**users\_api** () → influxdb\_client.users\_api.UsersApi  
Creates the Users API instance.

**Returns** users api

**write\_api** (*write\_options*=<influxdb\_client.write\_api.WriteOptions object>) → influxdb\_client.write\_api.WriteApi  
Creates a Write API instance

**Parameters** **write\_options** – write api configuration

**Returns** write api instance

## 2.2 QueryApi

**class** influxdb\_client.QueryApi (*influxdb\_client*)  
Initializes query client.

**Parameters** **influxdb\_client** – influxdb client

**query** (*query*: str; *org*=None, *dialect*={*annotations*: ['datatype', 'group', 'default'], *comment\_prefix*: '#', *date\_time\_format*: 'RFC3339', *delimiter*: ',', *header*: True}) → List[influxdb\_client.client.flux\_table.FluxTable]  
Synchronously executes the Flux query and return result as a List['FluxTable']

#### Parameters

- **query** – the Flux query
- **org** – organization name (optional if already specified in InfluxDBClient)
- **dialect** – csv dialect format

#### Returns

**query\_csv** (*query*: str; *org*=None, *dialect*: influxdb\_client.domain.dialect.Dialect = {*annotations*: ['datatype', 'group', 'default'], *comment\_prefix*: '#', *date\_time\_format*: 'RFC3339', *delimiter*: ',', *header*: True})  
Executes the Flux query and return results as a CSV iterator. Each iteration returns a row of the CSV file.

#### Parameters

- **query** – a Flux query
- **org** – organization name (optional if already specified in InfluxDBClient)
- **dialect** – csv dialect format

**Returns** The returned object is an iterator. Each iteration returns a row of the CSV file (which can span multiple input lines).

**query\_raw** (*query*: str; *org*=None, *dialect*={*annotations*: ['datatype', 'group', 'default'], *comment\_prefix*: '#', *date\_time\_format*: 'RFC3339', *delimiter*: ',', *header*: True})  
Synchronously executes the Flux query and return result as raw unprocessed result as a str

#### Parameters

- **query** – a Flux query
- **org** – organization name (optional if already specified in InfluxDBClient)
- **dialect** – csv dialect format

**Returns** str

## 2.3 WriteApi

```
class influxdb_client.WriteApi (influxdb_client, write_options: influxdb_client.client.write_api.WriteOptions = <influxdb_client.client.write_api.WriteOptions object>)
```

**write** (*bucket*: str; *org*: str; *record*: Union[str, List[str], influxdb\_client.client.write.point.Point, List[Point], rx.core.observable.observable.Observable], *write\_precision*: influxdb\_client.domain.write\_precision.WritePrecision = 'ns') → None  
Writes time-series data into influxdb.

#### Parameters

- **org** (*str*) – specifies the destination organization for writes; take either the ID or Name interchangeably; if both orgID and org are specified, org takes precedence. (required)
- **bucket** (*str*) – specifies the destination bucket for writes (required)

- **write\_precision** (*WritePrecision*) – specifies the precision for the unix timestamps within the body line-protocol
- **record** – Points, line protocol, RxPY Observable to write

## 2.4 BucketsApi

**class** influxdb\_client.**BucketsApi** (*influxdb\_client*)

**create\_bucket** (*bucket=None, bucket\_name=None, org\_id=None, retention\_rules=None, description=None*) → influxdb\_client.domain.bucket.Bucket  
Create a bucket # noqa: E501

**Parameters**

- **bucket** (*Bucket*) – bucket to create (required)
- **bucket\_name** – bucket name
- **description** – bucket description
- **org\_id** – org\_id
- **bucket\_name** – bucket name
- **retention\_rules** – retention rules array or single BucketRetentionRules

**Returns** Bucket If the method is called asynchronously, returns the request thread.

**delete\_bucket** (*bucket*)  
Delete a bucket # noqa: E501

**Parameters** **bucket** – bucket id or Bucket

**Returns** Bucket If the method is called asynchronously, returns the request thread.

**find\_bucket\_by\_id** (*id*)  
Find bucket by ID

**Parameters** **id** –

**Returns**

**find\_bucket\_by\_name** (*bucket\_name*)  
Find bucket by name

**Parameters** **bucket\_name** – bucket name

**Returns** Bucket

**find\_buckets** ()  
Gets all buckets

**class** influxdb\_client.domain.**Bucket** (*links=None, id=None, name=None, description=None, org\_id=None, rp=None, created\_at=None, updated\_at=None, retention\_rules=None, labels=None*)

NOTE: This class is auto generated by OpenAPI Generator. Ref: <https://openapi-generator.tech>

Do not edit the class manually.

Bucket - a model defined in OpenAPI

**created\_at**  
Gets the created\_at of this Bucket. # noqa: E501

**Returns** The created\_at of this Bucket. # noqa: E501

**Return type** datetime

#### description

Gets the description of this Bucket. # noqa: E501

**Returns** The description of this Bucket. # noqa: E501

**Return type** str

#### id

Gets the id of this Bucket. # noqa: E501

**Returns** The id of this Bucket. # noqa: E501

**Return type** str

#### labels

Gets the labels of this Bucket. # noqa: E501

**Returns** The labels of this Bucket. # noqa: E501

**Return type** list[Label]

#### links

Gets the links of this Bucket. # noqa: E501

**Returns** The links of this Bucket. # noqa: E501

**Return type** BucketLinks

#### name

Gets the name of this Bucket. # noqa: E501

**Returns** The name of this Bucket. # noqa: E501

**Return type** str

#### org\_id

Gets the org\_id of this Bucket. # noqa: E501

**Returns** The org\_id of this Bucket. # noqa: E501

**Return type** str

#### retention\_rules

Gets the retention\_rules of this Bucket. # noqa: E501

rules to expire or retain data. No rules means data never expires. # noqa: E501

**Returns** The retention\_rules of this Bucket. # noqa: E501

**Return type** list[BucketRetentionRules]

#### rp

Gets the rp of this Bucket. # noqa: E501

**Returns** The rp of this Bucket. # noqa: E501

**Return type** str

#### to\_dict ()

Returns the model properties as a dict

#### to\_str ()

Returns the string representation of the model

**updated\_at**

Gets the updated\_at of this Bucket. # noqa: E501

**Returns** The updated\_at of this Bucket. # noqa: E501

**Return type** datetime

## 2.5 LabelsApi

**class** influxdb\_client.LabelsApi (influxdb\_client)

The client of the InfluxDB 2.0 that implements Labels HTTP API endpoint.

**clone\_label** (cloned\_name: str, label: influxdb\_client.domain.label.Label) → influxdb\_client.domain.label.Label  
Creates the new instance of the label as a copy existing label.

**Parameters**

- **cloned\_name** – new label name
- **label** – existing label

**Returns** cloned Label

**create\_label** (name: str, org\_id: str, properties: Dict[str, str] = None) → influxdb\_client.domain.label.Label  
Creates a new label.

**Parameters**

- **name** – label name
- **org\_id** – organization id
- **properties** – optional label properties

**Returns** created label

**delete\_label** (label: Union[str, influxdb\_client.domain.label.Label])  
Deletes the label.

**Parameters** **label** – label id or Label

**find\_label\_by\_id** (label\_id: str)  
Retrieves the label by id.

**Parameters** **label\_id** –

**Returns** Label

**find\_label\_by\_org** (org\_id) → List[influxdb\_client.domain.label.Label]  
Gets the list of all labels for given organization.

**Parameters** **org\_id** – organization id

**Returns** list of labels

**find\_labels** () → List[influxdb\_client.domain.label.Label]  
Gets all available labels.

**Returns** labels

**update\_label** (label: influxdb\_client.domain.label.Label)  
Updates an existing label name and properties.



**Parameters** `label` – label

**Returns** the updated label

## 2.6 OrganizationsApi

**class** `influxdb_client.OrganizationsApi` (`influxdb_client`)

The client of the InfluxDB 2.0 that implements Organizations HTTP API endpoint.

**class** `influxdb_client.domain.Organization` (`links=None`, `id=None`, `name=None`, `description=None`, `created_at=None`, `updated_at=None`, `status='active'`)

NOTE: This class is auto generated by OpenAPI Generator. Ref: <https://openapi-generator.tech>

Do not edit the class manually.

Organization - a model defined in OpenAPI

**created\_at**

Gets the created\_at of this Organization. # noqa: E501

**Returns** The created\_at of this Organization. # noqa: E501

**Return type** `datetime`

**description**

Gets the description of this Organization. # noqa: E501

**Returns** The description of this Organization. # noqa: E501

**Return type** `str`

**id**

Gets the id of this Organization. # noqa: E501

**Returns** The id of this Organization. # noqa: E501

**Return type** `str`

**links**

Gets the links of this Organization. # noqa: E501

**Returns** The links of this Organization. # noqa: E501

**Return type** `OrganizationLinks`

**name**

Gets the name of this Organization. # noqa: E501

**Returns** The name of this Organization. # noqa: E501

**Return type** `str`

**status**

Gets the status of this Organization. # noqa: E501

if inactive the organization is inactive. # noqa: E501

**Returns** The status of this Organization. # noqa: E501

**Return type** `str`

**to\_dict** ()

Returns the model properties as a dict

**to\_str()**  
Returns the string representation of the model

**updated\_at**  
Gets the updated\_at of this Organization. # noqa: E501

**Returns** The updated\_at of this Organization. # noqa: E501

**Return type** datetime

## 2.7 UsersApi

**class** influxdb\_client.**UsersApi** (influxdb\_client)

**class** influxdb\_client.domain.**User** (id=None, oauth\_id=None, name=None, status='active', links=None)

NOTE: This class is auto generated by OpenAPI Generator. Ref: <https://openapi-generator.tech>

Do not edit the class manually.

User - a model defined in OpenAPI

**id**  
Gets the id of this User. # noqa: E501

**Returns** The id of this User. # noqa: E501

**Return type** str

**links**  
Gets the links of this User. # noqa: E501

**Returns** The links of this User. # noqa: E501

**Return type** UserLinks

**name**  
Gets the name of this User. # noqa: E501

**Returns** The name of this User. # noqa: E501

**Return type** str

**oauth\_id**  
Gets the oauth\_id of this User. # noqa: E501

**Returns** The oauth\_id of this User. # noqa: E501

**Return type** str

**status**  
Gets the status of this User. # noqa: E501

if inactive the user is inactive. # noqa: E501

**Returns** The status of this User. # noqa: E501

**Return type** str

**to\_dict()**  
Returns the model properties as a dict

**to\_str()**  
Returns the string representation of the model

## 2.8 TasksApi

**class** influxdb\_client.TasksApi (influxdb\_client)

**cancel\_run** (task\_id: str, run\_id: str)

Cancel a currently running run. :param task\_id: :param run\_id:

**find\_tasks** (\*\*kwargs)

List tasks.

### Parameters

- **name** (str) – only returns tasks with the specified name
- **after** (str) – returns tasks after specified ID
- **user** (str) – filter tasks to a specific user ID
- **org** (str) – filter tasks to a specific organization name
- **org\_id** (str) – filter tasks to a specific organization ID
- **limit** (int) – the number of tasks to return

### Returns

**get\_logs** (task\_id: str) → List[influxdb\_client.domain.log\_event.LogEvent]

Retrieve all logs for a task. :param task\_id: task id

**get\_run** (task\_id: str, run\_id: str) → influxdb\_client.domain.run.Run

Get run record for specific task and run id :param task\_id: task id :param run\_id: run id :return: Run for specified task and run id

**get\_runs** (task\_id, \*\*kwargs) → List[influxdb\_client.domain.run.Run]

Retrieve list of run records for a task

### Parameters

- **task\_id** – task id
- **after** (str) – returns runs after specified ID
- **limit** (int) – the number of runs to return
- **after\_time** (datetime) – filter runs to those scheduled after this time, RFC3339
- **before\_time** (datetime) – filter runs to those scheduled before this time, RFC3339

**retry\_run** (task\_id: str, run\_id: str)

Retry a task run. :param task\_id: task id :param run\_id: run id

**run\_manually** (task\_id: str, scheduled\_for: <module 'datetime' from  
'/home/docs/.pyenv/versions/3.6.8/lib/python3.6/datetime.py'> = None)

Manually start a run of the task now overriding the current schedule.

### Parameters

- **task\_id** –
- **scheduled\_for** – planned execution

```
class influxdb_client.domain.Task (id=None, type=None, org_id=None, org=None,
                                   name=None, description=None, status=None, labels=None,
                                   authorization_id=None, flux=None, every=None, cron=None,
                                   offset=None, latest_completed=None, created_at=None,
                                   updated_at=None, links=None)
```

NOTE: This class is auto generated by OpenAPI Generator. Ref: <https://openapi-generator.tech>

Do not edit the class manually.

Task - a model defined in OpenAPI

#### **authorization\_id**

Gets the authorization\_id of this Task. # noqa: E501

The ID of the authorization used when this task communicates with the query engine. # noqa: E501

**Returns** The authorization\_id of this Task. # noqa: E501

**Return type** str

#### **created\_at**

Gets the created\_at of this Task. # noqa: E501

**Returns** The created\_at of this Task. # noqa: E501

**Return type** datetime

#### **cron**

Gets the cron of this Task. # noqa: E501

A task repetition schedule in the form ‘\* \* \* \* \*’; parsed from Flux. # noqa: E501

**Returns** The cron of this Task. # noqa: E501

**Return type** str

#### **description**

Gets the description of this Task. # noqa: E501

An optional description of the task. # noqa: E501

**Returns** The description of this Task. # noqa: E501

**Return type** str

#### **every**

Gets the every of this Task. # noqa: E501

A simple task repetition schedule; parsed from Flux. # noqa: E501

**Returns** The every of this Task. # noqa: E501

**Return type** str

#### **flux**

Gets the flux of this Task. # noqa: E501

The Flux script to run for this task. # noqa: E501

**Returns** The flux of this Task. # noqa: E501

**Return type** str

#### **id**

Gets the id of this Task. # noqa: E501

**Returns** The id of this Task. # noqa: E501

**Return type** `str`

#### **labels**

Gets the labels of this Task. # noqa: E501

**Returns** The labels of this Task. # noqa: E501

**Return type** `list[Label]`

#### **latest\_completed**

Gets the latest\_completed of this Task. # noqa: E501

Timestamp of latest scheduled, completed run, RFC3339. # noqa: E501

**Returns** The latest\_completed of this Task. # noqa: E501

**Return type** `datetime`

#### **links**

Gets the links of this Task. # noqa: E501

**Returns** The links of this Task. # noqa: E501

**Return type** `TaskLinks`

#### **name**

Gets the name of this Task. # noqa: E501

The name of the task. # noqa: E501

**Returns** The name of this Task. # noqa: E501

**Return type** `str`

#### **offset**

Gets the offset of this Task. # noqa: E501

Duration to delay after the schedule, before executing the task; parsed from flux, if set to zero it will remove this option and use 0 as the default. # noqa: E501

**Returns** The offset of this Task. # noqa: E501

**Return type** `str`

#### **org**

Gets the org of this Task. # noqa: E501

The name of the organization that owns this Task. # noqa: E501

**Returns** The org of this Task. # noqa: E501

**Return type** `str`

#### **org\_id**

Gets the org\_id of this Task. # noqa: E501

The ID of the organization that owns this Task. # noqa: E501

**Returns** The org\_id of this Task. # noqa: E501

**Return type** `str`

#### **status**

Gets the status of this Task. # noqa: E501

**Returns** The status of this Task. # noqa: E501

**Return type** `TaskStatusType`

**to\_dict ()**

Returns the model properties as a dict

**to\_str ()**

Returns the string representation of the model

**type**

Gets the type of this Task. # noqa: E501

The type of task, this can be used for filtering tasks on list actions. # noqa: E501

**Returns** The type of this Task. # noqa: E501

**Return type** str

**updated\_at**

Gets the updated\_at of this Task. # noqa: E501

**Returns** The updated\_at of this Task. # noqa: E501

**Return type** datetime

InfluxDB 2.0 python client library. The library covers InfluxDB 2.0

---

## InfluxDB 2.0 client features

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- **Querying data**
  - using the Flux language
  - into csv, raw data, `flux_table` structure
- **Writing data using**
  - Line Protocol
  - Data Point
  - RxPY Observable
  - Not implemented yet - write user types using decorator - write Pandas DataFrame
- **InfluxDB 2.0 API client for management**
  - the client is generated from the `swagger` by using the `openapi-generator`
  - organizations & users management
  - buckets management
  - tasks management
  - authorizations
  - health check





InfluxDB python library uses [RxPY](#) - The Reactive Extensions for Python (RxPY).

**Python 3.6** or later is required.

### 4.1 pip install

The python package is hosted on Github, you can install latest version directly:

```
pip3 install git+https://github.com/influxdata/influxdb-client-python.git
```

Then import the package:

```
import influxdb_client
```

### 4.2 Setuptools

Install via Setuptools.

```
python setup.py install --user
```

(or `sudo python setup.py install` to install the package for all users)



Please follow the *Installation* and then run the following:

```
from influxdb_client import InfluxDBClient, Point
from influxdb_client.client.write_api import SYNCHRONOUS

bucket = "my-bucket"

client = InfluxDBClient(url="http://localhost:9999", token="my-token", org="my-org")

write_api = client.write_api(write_options=SYNCHRONOUS)
query_api = client.query_api()

p = Point("my_measurement").tag("location", "Prague").field("temperature", 25.3)

write_api.write(bucket=bucket, org="my-org", record=p)

## using Table structure
tables = query_api.query('from(bucket:"my-bucket") |> range(start: -10m)')

for table in tables:
    print(table)
    for row in table.records:
        print (row.values)

## using csv library
csv_result = query_api.query_csv('from(bucket:"my-bucket") |> range(start: -10m)')
val_count = 0
for row in csv_result:
    for cell in row:
        val_count += 1
```



## CHAPTER 6

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