influxDB

17. May 2024

Martin Johannes Brucker
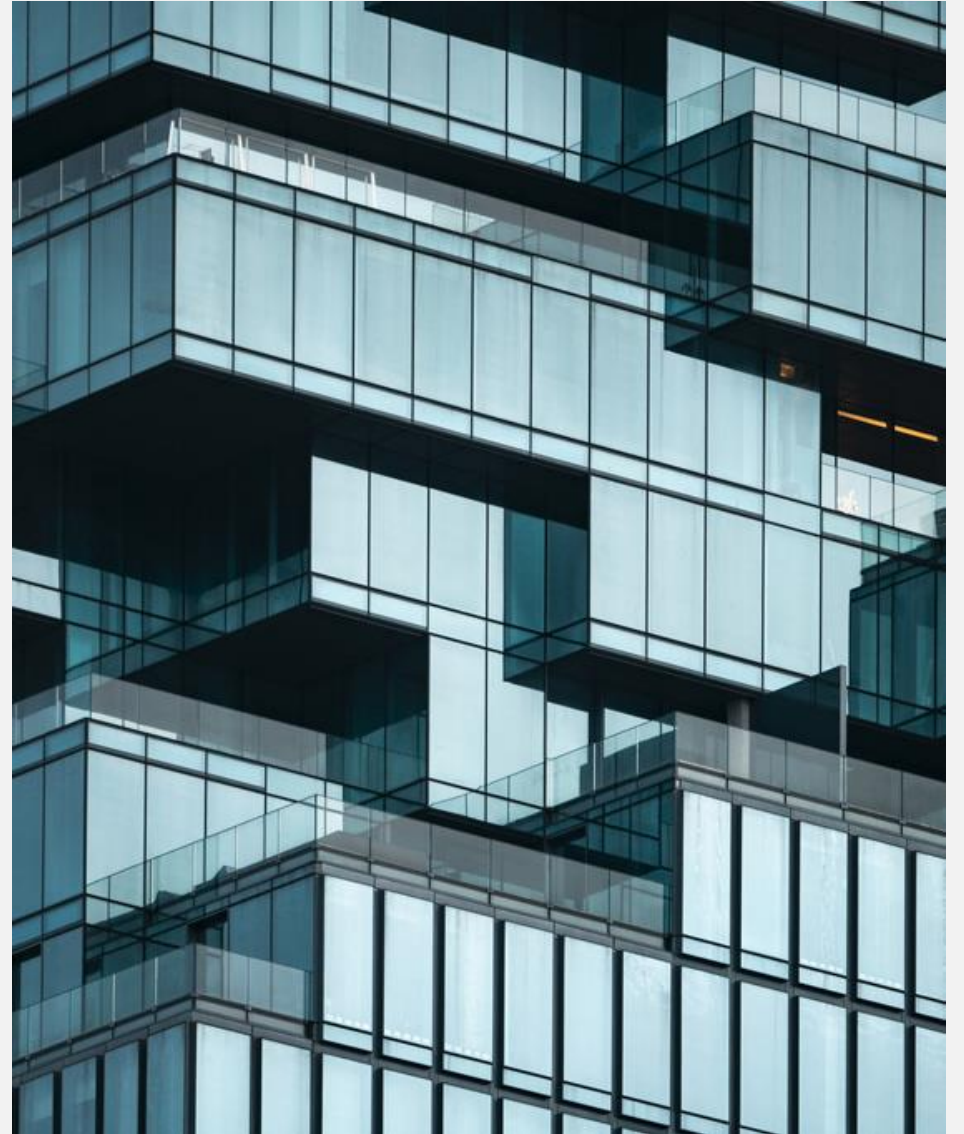
Agenda

- Time series data & databases

- Company

- Licensing

- Product portfolio

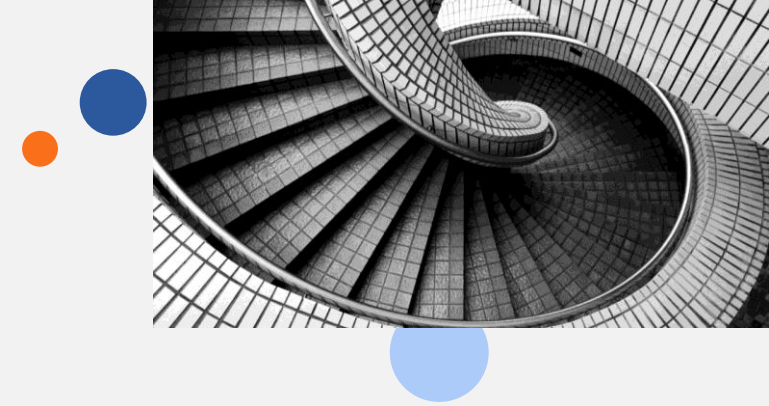- Installation & Configuration

- programming

Time series data

Time series data is a sequence of data points indexed in time order. It is also called time-stamped data, as it is data collected at different points in time. Time series data is used to track change over time and has a natural temporal ordering.

Company

InfluxData

- **Headquarters**: Strategically located in **San Francisco**, a hub for innovation and technology.

- **Customer Base**: Robust portfolio of **1,900 commercial customers**, showcasing trust and reliability in our services.

- **Usage**: Impressive 750,000 active instances, indicating widespread adoption and operational scale.

- **Revenue Stream**: A significant **50% of revenue** generated through **InfluxDB Cloud**, reflecting our strong cloud presence and customer preference for our cloud solutions.

Source https://www.influxdata.com/blog/influxdata-closes-series-e-round-and-raises-81-million/

Licensing

- Serverless & Dedicated Plans

- **Pay-as-you-go:** Data In: $0.0025/MB | Query: $0.012/100 | Storage: $0.002/GB-hr | Data Out: $0.09/GB

- Scale discounts on annual plans

- 24/7 infrastructure monitoring

- End-to-end encryption & optional SAML/SSO

Source https://www.influxdata.com/influxdb-cloud-pricing/

Product portfolio

Edge

Open source

Not yet released

Community

Free to use

InfluxDB

Paid licence

Clustered

Self managed, anual subscription

Cloud Serverless

Multi-tenant, usage billing

Cloud Dedicated

Single tenant, resource billing

Installation

Use the cloud service no installation required

Using Docker:

```
docker run \
-p 8086:8086 \
-v "$PWD/data:/var/lib/influxdb2" \
-v "$PWD/config:/etc/influxdb2" \
influxdb:2
```

Hardware requirement   for a single node

vCPU or CPU	RAM	IOPS	Writes per second	Queries* per second	Unique series
2-4 cores	2-4 GB	500	< 5,000	< 5	< 100,000
4-6 cores	8-32 GB	500-1000	< 250,000	< 25	< 1,000,000
8+ cores	32+ GB	1000+	> 250,000	> 25	> 1,000,000

Installation

Using the web gui to setup the DB

Default port for the webui is 8086

Programming

Using the python lib:

```
pip install influxdb_client
```

Initialize:

```
client = influxdb_client.
              InfluxDBClient(
                  url=url,
                  token=token,
                  org=org)
```