



QuasarDB

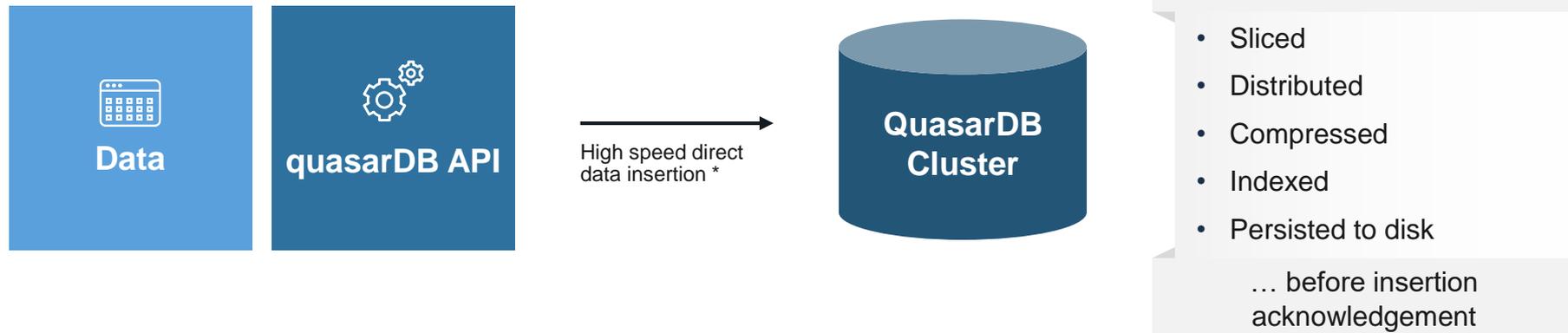
Run your code in the database

User Defined Functions in Python

The Problem



QuasarDB data insertion as of 2.x



*** e.g., tick-by-tick market data stream captured at up to 100M+ updates/second**



Data access: QuasarDB query



- Queries are translated to low level API calls
- Users are unconcerned with data location, or if it's on disk or in memory

e.g. `select min(bid) from my_stocks in range(2001, +1d)`

QuasarDB computes the minimum and returns only the result.

Queries run on the nodes containing the requested data, and QuasarDB transparently loads data from disk as needed.



Benefit: slow data exchanges are minimized

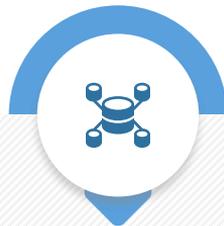


Benefit: analysts can work naturally on the whole history



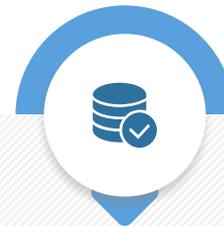
Use the built-in functions from QuasarDB?

There will always be a mathematical function you need we didn't implement



Get the data from QuasarDB and run it in your Python?

Not sensible if the data transfer time is much greater than the computation time

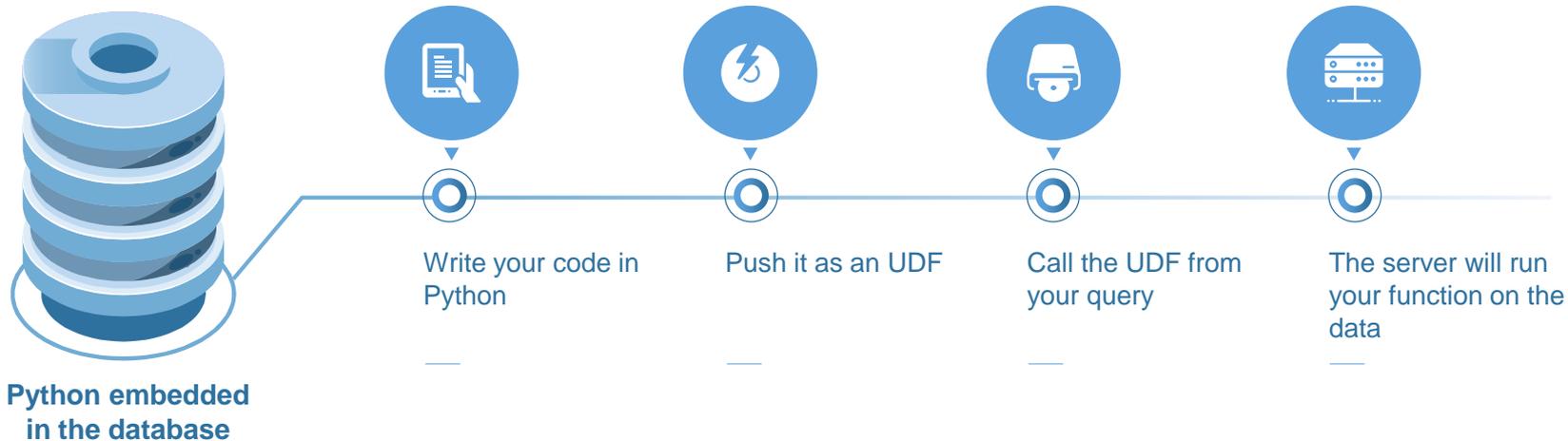


Run your own function inside QuasarDB?

But how?



UDF in QuasarDB 3.1



Example

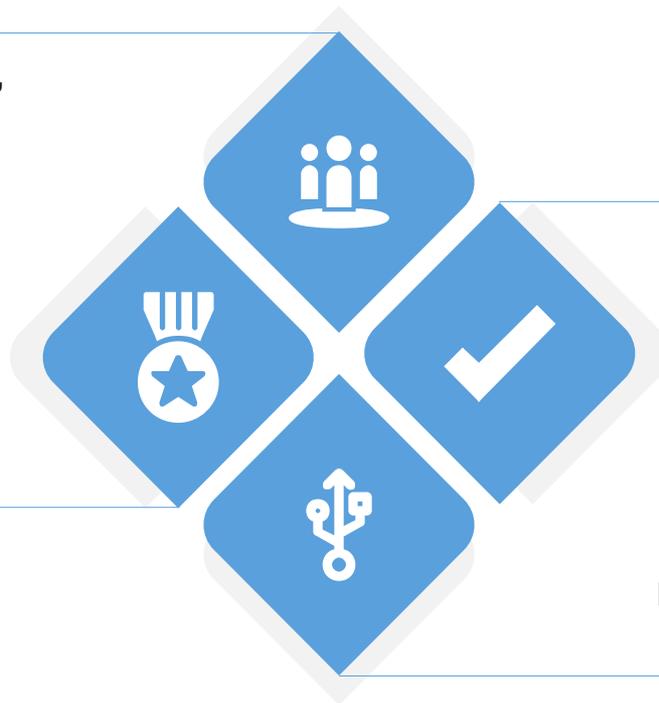
```
Select udf_my_sum(bid) from my_stocks in range(2001, +1d)
```

Why Python?



**Universally used: transferable skill,
no advanced training required**

Satisfactory performance



The license allows it 😊

**Python can be embedded and called
from C++**



Benefits



**Any kind of
computation is
now possible**



**Optimize data
transfer**



**Greatly simplifies
workflows**

In the future:



Allow numpy and Pandas



QuasarDB

ENROLL IN THE BETA PROGRAM!

[HTTPS://INFO.QUASARDB.NET/BETA](https://info.quasardb.net/beta)



QuasarDB

THANK YOU

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