BQuant Enterprise: Intraday Analytics

Build new alpha strategies, optimise trade execution, and gain fresh risk management insights by harnessing the power of 15 petabytes of intraday data

Working with intraday datasets can help differentiate investment strategies, trade execution and risk management. However, these datasets are difficult to procure and use. Different file types, storage conventions and datetime formats all add to the complexity of developing intraday strategies. Significant investment in compute infrastructure is often needed, taking time to build and requiring large teams of people to set up and maintain.

The BQuant Enterprise Intraday Analytics Add-on package solves these issues by providing comprehensive access to historical, multi-asset class intraday datasets and pre-built quant analytics libraries to quickly generate new insights. Built on BQuant Enterprise, Intraday Analytics provides the distributed compute required to help you access, process, and analyze large intraday datasets for intraday alpha research, execution research, risk management and transaction cost analysis.

Data Content

Multi-asset class access to 1 minute bar Intraday datasets from 2008

- OHLCV intraday pricing for global cash equities, equity indices, futures (equity, bond, commodity, currency, interest rate), G10 and EM currencies, sovereign bonds and corporate bonds
- Covers both actual trades and top-level bid/ask prices and sizes (Q4 2023)
- Intraday FX vols, forwards and NDFs as well as Bloomberg generic yield curve intraday datasets
- Homogenized datasets aligned to Bloomberg Tickers and FIGI identifiers to start building use cases out of the box
- Timestamp aligned across markets and available point-in-time
- Pre-cleaned 1-minute bars updated throughout the day, with finer granularity (including ticks) coming in 2024.

Pre-built Analytics

Pre-build analytics and APIs to speed up development while maintaining flexibility

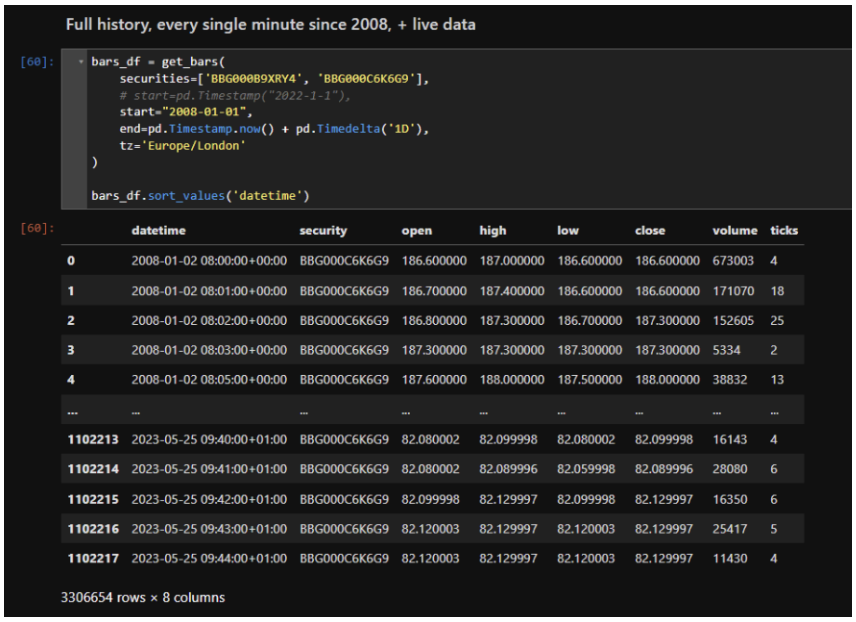
- Intraday Analytics is pre-packaged with flexible libraries to help you access, process and analyze intraday strategies fast
- Libraries integrated with BQuant Enterprise providing distributed compute out of the box
- Data access and quant analytics APIs, mapped across timezones, filtering, condition code normalized, plug in your own logic for filtering.
- Quant analytics including Intraday futures rolling, event and alpha decay studies and bond basis.

Compute

Scalable platform for principled quant research

- BQuant provides a pre-configured distributed compute environment to start analyzing data and developing insights with minimal setup
- Intraday data sets can run to petabytes of data. Our cloud solutions, make the data available at your fingertips to begin work on intraday models without requiring significant additional investment and time

Example Use Cases



Full history, every single minute since 2008, + live data

```python
[60]: bars_df = get_bars(
          securities=['BBG000B9XRY4', 'BBG000C6K6G9'],
          # start=pd.Timestamp("2022-1-1"),
          start="2008-01-01",
          end=pd.Timestamp.now() + pd.Timedelta('1D'),
          tz='Europe/London'
      )

      bars_df.sort_values('datetime')
```

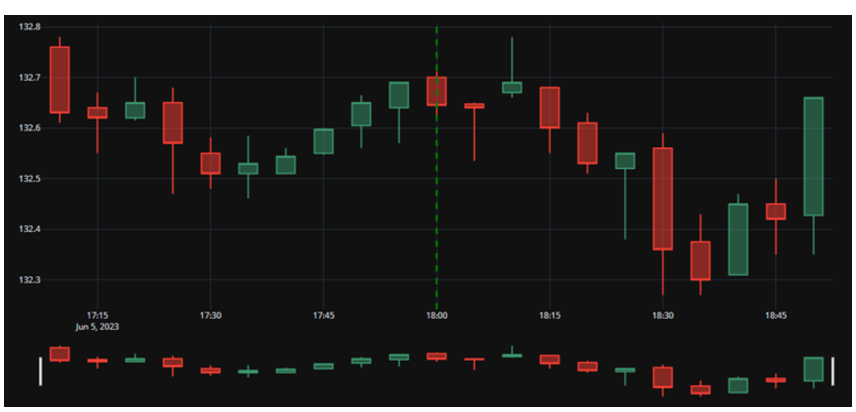
[60]:

	datetime	security	open	high	low	close	volume	ticks
0	2008-01-02 08:00:00+00:00	BBG000C6K6G9	186.600000	187.000000	186.600000	186.600000	673003	4
1	2008-01-02 08:01:00+00:00	BBG000C6K6G9	186.700000	187.400000	186.600000	186.600000	171070	18
2	2008-01-02 08:02:00+00:00	BBG000C6K6G9	186.800000	187.300000	186.700000	187.300000	152605	25
3	2008-01-02 08:03:00+00:00	BBG000C6K6G9	187.300000	187.300000	187.300000	187.300000	5334	2
4	2008-01-02 08:05:00+00:00	BBG000C6K6G9	187.600000	188.000000	187.500000	188.000000	38832	13
...	...	...	...	...	...	...	...	...
1102213	2023-05-25 09:40:00+01:00	BBG000C6K6G9	82.080002	82.099998	82.080002	82.099998	16143	4
1102214	2023-05-25 09:41:00+01:00	BBG000C6K6G9	82.080002	82.089996	82.059998	82.089996	28080	6
1102215	2023-05-25 09:42:00+01:00	BBG000C6K6G9	82.099998	82.129997	82.099998	82.129997	16350	6
1102216	2023-05-25 09:43:00+01:00	BBG000C6K6G9	82.120003	82.129997	82.120003	82.129997	25417	5
1102217	2023-05-25 09:44:00+01:00	BBG000C6K6G9	82.120003	82.129997	82.120003	82.129997	11430	4

3306654 rows × 8 columns

Easy to use APIs to access, filter and construct bars

Event driven research to analyse price and volume impact following news announcements



Execution Research

- Volume and liquidity forecasting
- Intraday return forecasting
- Event studies
- Execution timing analysis

Alpha Research

Creating more realistic intraday simulations for:

- Alpha strategies (such as short-term reversals)
- Stat arb strategies (trading different correlated instruments at the same time)
- Event-driven research (price impact of macro events such as rate hikes or economic data releases)
- News-driven research (price impact of breaking news on the relevant markets and securities)

Risk management

- Enhanced VAR modelling
- Facilitate the design of intraday hedging strategies
- Improved skewness modelling
- Short-term volatility forecasting

Post-trade analysis

- Enhance benchmark algos such as VWAP, TWAP calculations
- Assess implementation shortfall

BQuant Enterprise Solutions

BQuant Enterprise is a cloud-based analytics platform specifically designed for quantitative analysts and data scientists in the financial markets. BQuant Enterprise provides broad programmatic access to Bloomberg's comprehensive range of high-quality market-leading financial datasets and services via powerful APIs, along with quant tools.

- **Equity Signal Lab:** Equity signal research, advanced backtesting and portfolio construction
- **Textual Analytics:** Historical Bloomberg news headlines, body, metadata and language models for NLP workflows
- **Derived Results:** Export of model results from the BQuant Sandbox

Take the next step.

For additional information, press the <HELP> key twice on the Bloomberg Terminal®.

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