

ONEMARKETDATA



Solutions from OneTick and R

For Market Data Time Series Analysis

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R/Finance 2012: Applied Finance with R
May 11 & 12, Chicago, IL, USA

OneTick: Sample Business Cases

Our clients:

- ❑ **Hedge Funds & Proprietary Trading Firms**
- ❑ **Large Asset Managers**
- ❑ **Banks / Brokers**
- ❑ **Marketplaces**
- ❑ **Technology & Information Providers**

Business Cases:

- ❑ **Backtesting & Quantitative Research**
- ❑ **High frequency trading signal generation**
- ❑ **Pre- & Post- Trade TCA**
- ❑ **Backbone for Charting / Time and Sales**
- ❑ **Compliance & Regulatory Reporting**
- ❑ **Risk & Portfolio Analytics**

Let's look at a sample...

Sample Multi-Asset Class Business Case

WHAT THE CLIENT IS LOOKING FOR: now and later

Asset Classes

- ✓ **Equities & Futures, Levels I & II**
- ✓ **FX**
- ✓ **Later: Options, CDS and more; news feeds**

"Must Have" Features


- ✓ **Real-Time collection from Bloomberg & Reuters; later - directly from exchanges & custom feeds**
- ✓ **Back-fill history**
- ✓ **Historical & Real-Time Market Data Analysis**
- ✓ **Use existing  analytics libraries**
- ✓ **Order Book Building Analytics**
- ✓ **Corporate actions, symbol name mapping**
- ✓ **High compression, low latency, high throughput**

KEY TARGET CLIENT SYSTEMS:

C++ Trading App
Get real-time query signals

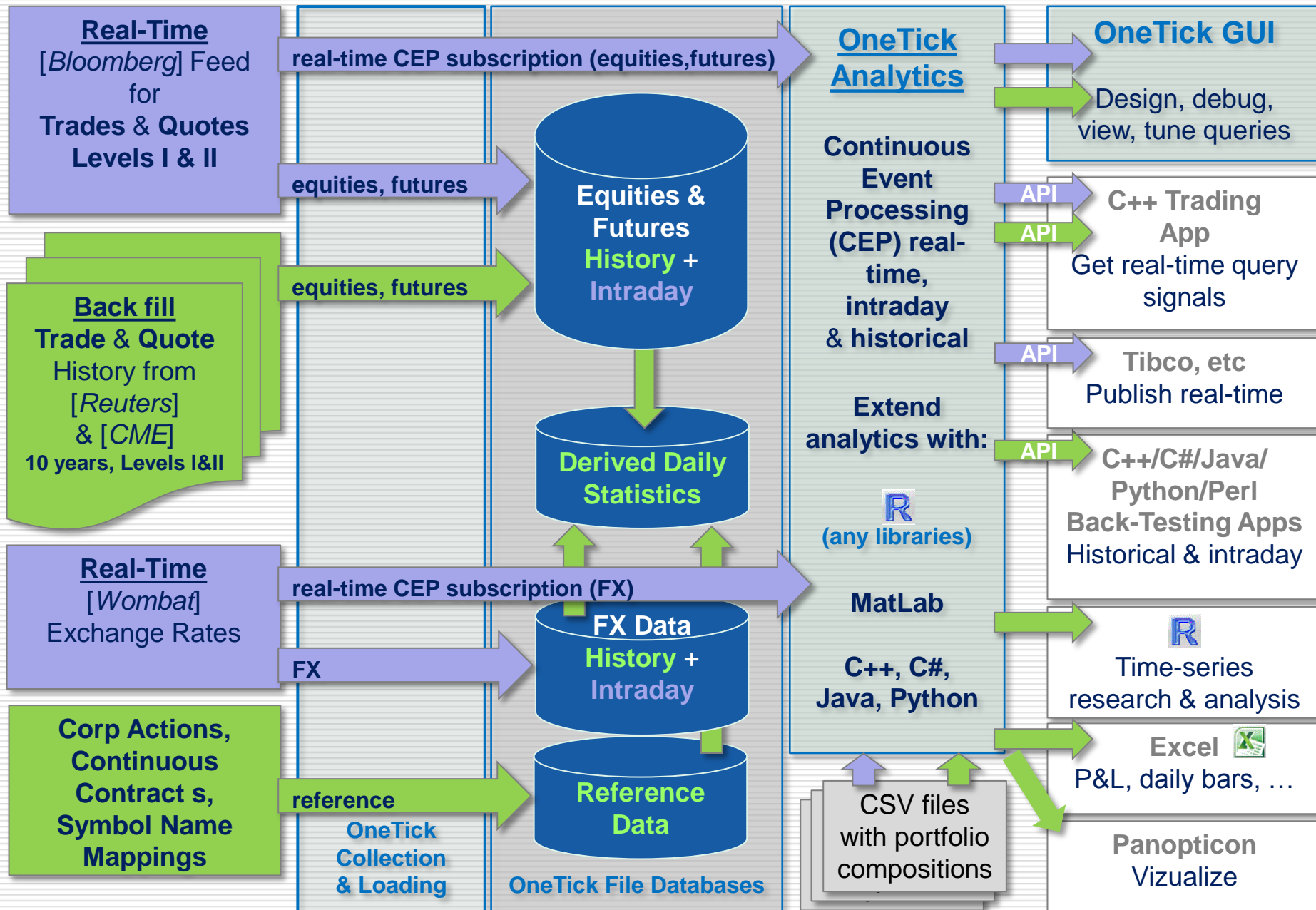
C#/Java/Python Back-Testing Apps
Test strategies historical/intraday


Historical time-series research & analysis

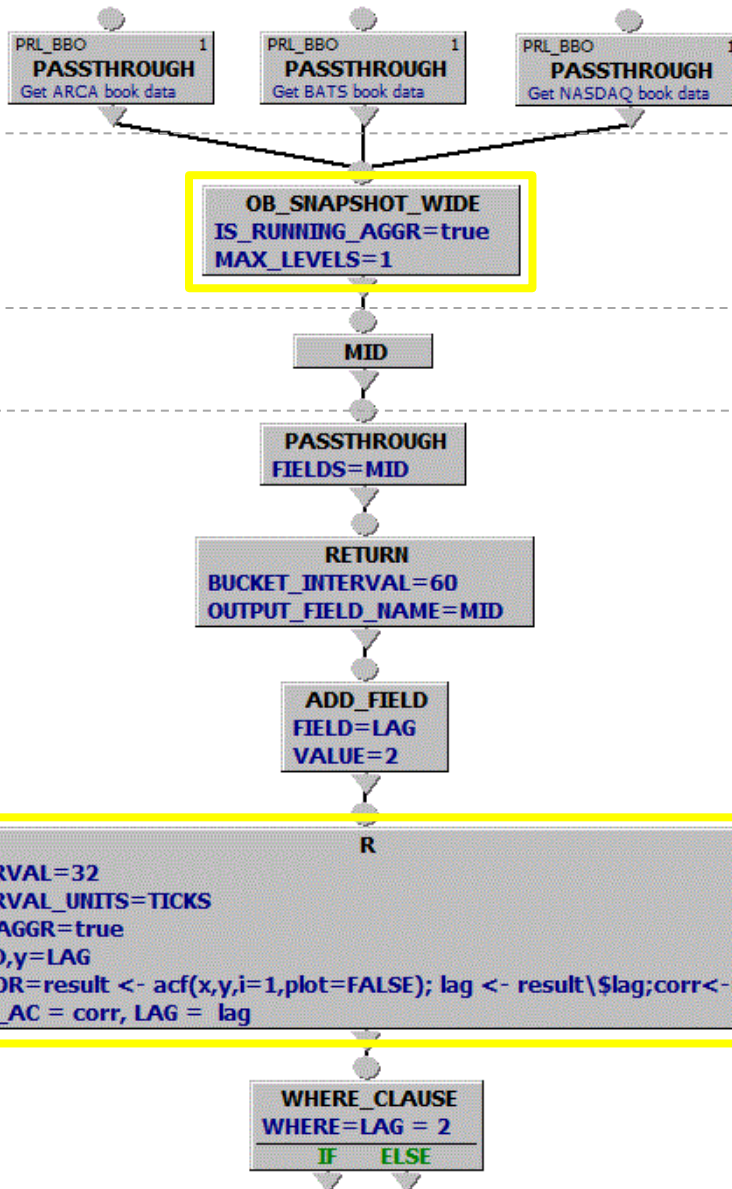
Excel 
P&L, daily bars

Panopticon
Visualize

OneTick Solution: Sample Multi-Asset Class Data Flow

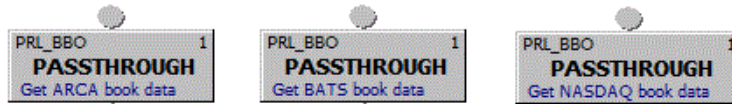


Sample Query: OneTick Consolidated Book + R ACF



1. Retrieve **3 order books**
2. Consolidate books, build level 1 "running" ASK/BID snapshots
3. Add tick-by-tick **MID**
4. Calculate **RETURN**(MID) over every 60 seconds
5. Add field **LAG**
6. Create **running** (a.k.a. **sliding**) aggregation of 32 **RETURN** ticks
Call **R** function **acf(...)** for each sliding group
Pass values of MID and LAG
9. Filter, view results...

Sample Query: OneTick Consolidated Book + R ACF

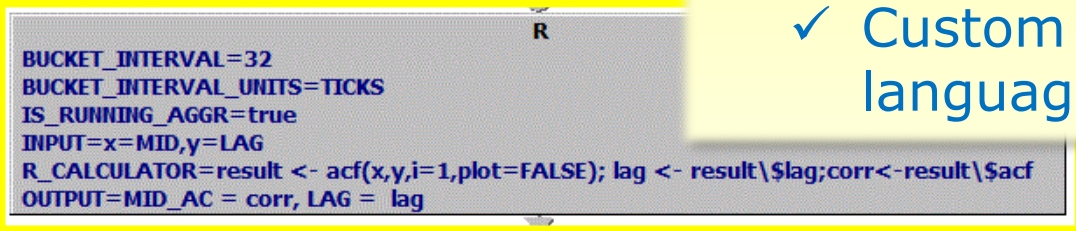
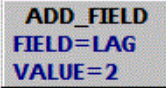
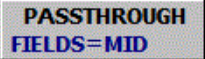


1. Retrieve **3 order books**

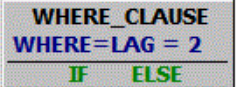


What else:

- ✓ Add any number of **R** nodes
- ✓ Load any **R** libraries
- ✓ Run this query in **Historical, Intraday** or **Real-Time CEP mode**
- ✓ Any asset classes, any number of books and symbols
- ✓ Custom functions in other languages



for each sliding group
Pass values of MID and
LAG



9. **Filter, view** results...

THANK YOU

**CONTACT US TO SCHEDULE A DEMO
AND VISIT OUR WEBSITE:
[HTTP://WWW.ONETICK.COM](http://www.onetick.com)**

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