Market Data Integration & Consolidation

Scalable data integration and consolidation is at the core of our platform, bringing together all of the data you need in a consistent environment for research, pre-trade, and risk analysis.

Multiple Sources of Market Data? We Put It Together.

"Data without analytics is noise, and analytics without data is useless."

Adam Lichtenstein, Managing Director, Technology and Innovations, Blackstone

Beacon's cloud data infrastructure equips clients with everything they need to integrate and consolidate market data into a central and reliable source. Market data frameworks, high-speed and real-time data injection, and comprehensive data warehouse tools facilitate data connections and keep portfolios, pricing models, and analytics fed with the data they need.

Whether you are looking to evaluate trades, research market signals, or analyze risks, consistent and scalable data is essential. Beacon supports multiple methods of integrating with in-house and external data and systems, bringing data together into a uniform environment that fosters collaboration and innovation.

Challenge

Ingesting multiple sources of market data into a comprehensive view, instead of shifting from one application to another and using spreadsheets as an ad-hoc data integration tool. Difficulty keeping research, trading, and risk management in sync with the speed of markets and customer demands.

Solution

Beacon's comprehensive data infrastructure, scalable compute grid, and broad set of dashboards and applications gather, normalize, and visualize data for authorized users to act on. Data monitoring tools, schedulers, and batch processing accelerate and streamline handling, processing, and management activities.

Result

More than just data centralization. Beacon's data architecture is helping clients ask more questions, get faster results, and derive deeper insights. Customizable financial object hierarchy backed by dependency graph framework makes complex calculations more efficient. Distributed computing enables faster simulations and larger sets of what-if scenarios. "Never delete" bi-temporal data model ensures reproducibility and satisfies audit and regulatory requests.

Unifying Your Market Data

Process market data and deal events at scale

High-performance and real-time data interfaces combined with elastic compute pools deliver efficient execution of data pipelines and ensure that data is available when it is needed. A live risk framework watches for new trades and market data events and automatically triggers recalculations and publishes results.

Maintain auditability and reproducibility

Beacon's bi-temporal data architecture processes updates and revisions without overwriting prior values. Reports and analytics can be run "as of " any date and time, consistently reproducing earlier results which supports explaining PnL changes, as well as audit and regulatory requirements.

Enhance calculation efficiency

Beacon's enterprise-scale dependency graph tracks state and only recalculates values dependent on changed inputs. Combined with object oriented code, clients get all the power of dependency tracking, efficient recalculation, and easy debugging in a framework that scales with demand.

Beacon Market Data Integration:
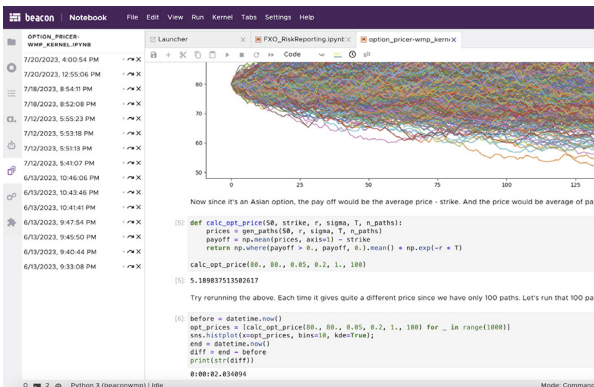# Your Data, Our Tools & Plugins

Our philosophy on data is simple: we provide frameworks for ingesting market and trade data, with multiple data plugins and interfaces, and sophisticated extract, transform, load (ETL) functionality that enables you to enhance and augment your existing systems with Beacon's capabilities. A transparent source code license allows you to extend and customize Beacon's capabilities for other internal or external data formats.

Inbound Integrations

- Market data and trade data ingestion frameworks, data validation, and automated complex ETLs from multiple input sources

- Flexible real-time data hub with proven integrations to diverse systems and technologies

- App Store deployable plugins that ingest real-time or on-demand market data from external sources, including Bloomberg B-PIPE, CME, Intex, MarketAxess, Markit, Morningstar, Refinitiv Data Scope, Refinitiv Elektron, S3
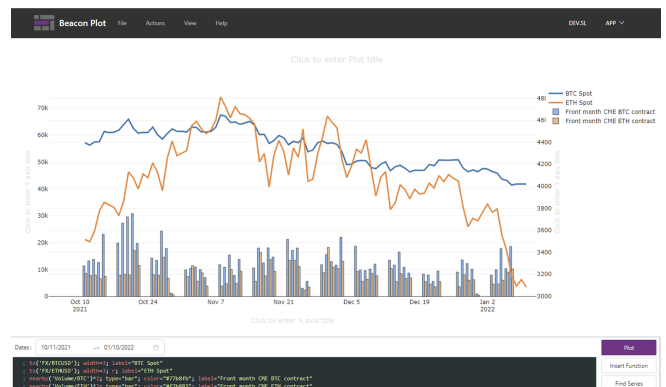
Outbound Integrations

- Seamlessly integrate and share data with existing internal and 3rd-party vendor applications, including legacy systems

- Match and reconcile trades and positions, send electronic trade confirmations, and produce regulatory reports

- Wide range of supported protocols and systems, including Excel, Kafka, Microsoft Graph API, REST, RPC APIs, WebSocket, Redis, SQL

Data Science and Visualization

- Beacon Notebook for data science research and analysis, securely and consistently using the same market data as production

- Leverage Beacon data analysis and visualization applications, including Beacon Plot Pro, Real-time Risk Viewer, Beacon Quote, and composable dashboards

- Understand data relationships with dependency graph browser

- Integration with Apache Superset data exploration and visualization tools

Market Data Success Stories

- Major bank leveraging proprietary pricing models and various third-party market data sources to view continuous, updated price streaming for bond portfolios

- Large asset manager developing active alternative commodity funds, feeding analysts with real-time market data to differentiate from passive or indexing approaches.

- Alternative asset manager delivering greater consistency, control, and scale of pricing models and risk analytics, giving them better insights on potential investments

With Beacon's containerized architecture, workloads and data are separate so data can come from wherever is most convenient. Whichever mechanisms you choose, Beacon enables an integrated and consolidated home for your data and brings it to life by connecting it with the models and analytics that give it meaning.