LSEG EXPERT TALK

Solving Market Data Challenges with Real-Time – Optimized: Four Use Cases

Introduction

Today, financial services firms and companies around the globe are rethinking their relationship with market data and moving to the cloud for a wide range of use cases. This Expert Talk contains four examples of use cases for Real-Time – Optimized, our all trade, quote conflated solution, based in the cloud.

Award-winning Real-Time – Optimized has signed more than 600 customers since its launch for a wide range of applications across the trade lifecycle. These use cases offer a range of possibilities for organisations to consider as they transform their market data landscapes:

- **Delivering cryptocurrency data to hedge funds**
- **Using News to power insight**
- **Boosting capabilities in the middle office**
- **Powering digital platforms with FX data**

There are many more use cases for Real-Time – Optimized – if you have one that you would like to share, please get in touch.

LSEG DATA & ANALYTICS

Delivering cryptocurrency data to hedge funds

Despite recent setbacks, the cryptocurrency market continues to evolve and investors are engaging with the asset class. The number of identity-verified cryptoasset users hit 402 million in November 2022[1] and the global cryptocurrency market capitalisation is approximately US$1.1tn today. Hedge funds – both large and small – are investing in cryptocurrency as a means of diversifying beyond more traditional securities, choosing, for example, to be long directional funds or market neutral funds. In addition, as investor interest in these emerging asset classes continues to evolve and the asset classes themselves continue to mature, the number of hedge funds dedicated to crypto and decentralised finance (DeFi) is growing. Some of these are engaging in yield farming, staking and lending on top of their investment activities as ways to earn additional income.

Having cryptocurrency data that can be trusted is important for hedge funds – and for their clients. In the front office, firms need robust data to be able to identify where the liquidity is for a particular trade, as liquidity can be very widely dispersed across multiple marketplaces – this is especially true in the world of crypto. To trade, firms must be able to identify where the best price is. Some firms may want to use the price data in their execution management systems (EMSs) as well. For the front office, Real-Time – Optimized also enables the use of computing and analytics in the cloud via the firm's preferred cloud provider. This can dramatically reduce the time and resources needed to work with data. Once the trade happens, the front office needs to perform analytics to determine whether the best price was achieved.

Then, the middle office needs to work off the same cryptocurrency data to mark it against the firm's P&L, using a snapshot of the price at a certain time of the day, depending on where the fund is located. Risk management and compliance teams also need to use the data to fulfil their obligations.

For hedge funds, Real-Time – Optimized is a robust source of cryptocurrency data. Firms can trust the quality of the data that they are receiving, which is important in these fast-moving markets. In addition, having cloud-based data means that the front, middle and back office can easily work with the same data across the entire trade lifecycle, reducing operational risk and greatly enhancing efficiency. Real-Time – Optimized cryptocurrency coverage includes:

- Over 17,000 crypto instruments available
- Real-time data from 39 exchanges are now available
- History data points for five-plus years available in some cases

"For hedge funds, investment in the cryptocurrency asset class is an exciting opportunity," says Matt Eddy, Head of Real-Time Delivery and Integration at LSEG. "However, it is an opportunity that also comes with risks. By using trusted data, these firms can significantly reduce many of the operational risks – including data-related risks – that they face, enabling them to concentrate on generating alpha."

Using News to power insight

Financial firms are using a combination of Real-Time – Optimized and Machine Readable News to enhance their trade signal detection. These two data sources can be combined with analytics to spot tradable news opportunities, such as event-based trading on economic releases and exclusive M&A news breaks. All of this processing can be completed in the cloud.

Our Machine Readable News uses Reuters News, an award-winning news service that publishes more than four million stories a year, across every asset class. More than 2,500 journalists work from 200 locations around the world. It also incorporates 50-plus third-party sources which publish more than 5.4 million stories each year.

Unstructured, real-time news from Reuters News and third-party services is transformed into a machine-readable feed. Meta-tagging and aggregation through both automation and human-based processes provide 90 additional fields of metadata including index data. The news is then further enriched with automated NLP analytics such as sentiment, significance, relevance scores, confidence scores and more. Machine Readable News is aligned to the same data model as Real-Time – Optimized, so having the two data sets work together is straightforward.

Firms creating news-based trading models are also able to use News Archive in combination with Tick History data to perform backtesting on event-trading models. Tick History is also in the same data model as Real-Time – Optimized, which helps to minimise the work involved in performing the backtesting.

Real-Time – Optimized is used in other AI, ML, and deep learning use cases both within LSEG and by our customers. The fact that the data is already in the cloud means that it is readily available to cloud-based analytics services and other tools, creating a much greater degree of agility than server-based arrangements. Says Eddy, "We think that more and more financial firms will want to use Real-Time – Optimized for their cloud-based AI and ML use cases going forward – this is where the industry is headed."

Boosting capabilities in the middle office

Today, banks, broker-dealers and asset managers realise that they need to be able to close the data and technology gap between the front office – where revenue is generated – and the middle and back offices. For decades, these parts of financial firms usually operated using different data and technology platforms, leading to cost inefficiencies, increased operational risk and, in some cases, serious losses – for example, from settlement failures.

Quite often, the middle and back office didn't have access to real-time data and they were using different technology – including different models – to their front-office peers. Moreover, legacy systems struggled to communicate with each other, sometimes necessitating manual workarounds.

In addition, new credit risk and market risk regulations – such as the Basel Committee on Banking Supervision's Fundamental Review of the Trading Book (FRTB) – require an unprecedented level of connection and transparency across the entire trade lifecycle.

Today, Real-Time – Optimized is being increasingly deployed for middle- and back-office use cases for the trading operations of banks, broker-dealers and asset managers. The fact that Real-Time – Optimized is based in the cloud makes it particularly popular because it means that the data can be accessed from anywhere geographically. This supports robust data governance and ensures that all processes across the organisation are using the exact same data – reducing operational risk and increasing efficiency.

In addition, Real-Time – Optimized is aligned to our Data Model, which means the data is also aligned to other Real-Time data feeds, such as Real-Time – Direct, Real-Time – Full Tick and Tick History. Having this connection across the latency spectrum means that the middle and back office can be sure that they are using the same data as the front office, using a common symbology to ensure consistency.

Firms are also investing in new technology to deliver this increased connectivity across the trade life cycle. To support this, at the end of May 2023, Murex announced that its MX.3 platform can be connected with Real-Time – Optimized when MX.3 is hosted on Amazon Web Services (AWS). MX.3 clients can also access Real-Time – Optimized via the Real-Time Distribution System and the Real-Time Managed Distribution Service.

Murex's single, open platform MX.3 supports trading, treasury, risk and post-trade operations, ensuring consistency in data, analytics and calculations across the front, middle and back office.

At a large North American bank which implemented MX.3 a few years ago, the front office and risk management teams now both have access to the same pricing library – previously they were using two different models. The platform also enables the bank to comply with market risk regulatory requirements, such as FRTB, much more easily. Having eliminated the need for reconciliation between different systems, it has also drastically reduced operational risk – and, when there are issues, they can be investigated quickly and effectively.

"Financial services firms around the globe are engaged in significant digital transformation," says Eddy. "Refreshing the data as well as the technology is essential. Market data in the cloud for the middle and back office can help ensure these teams are aligned to the front office, boosting efficiency and reducing risk."

Powering digital platforms with FX data

Around the globe, payment and money transfer companies are powered by FX data delivered through Real-Time – Optimized. These companies are focused on delivering innovative, fast and frictionless services to meet the needs of their clients as they conduct business, shop, travel and send money across borders and around the world.

Fundamental to their business model is the need for high-quality FX data that accurately reflects the 24/7/365 nature of the international currency markets. Using robust data helps these companies ensure that they – and their clients – are making the best decisions possible and are executing transactions in the most efficient way.

For example, many of these payment and money transfer companies use Real-Time – Optimized FX data for setting exchange rates and margins for their customers – either through a web-based interface that the client engages with directly, or to power the screens used by customer service representatives. These companies also deploy the data in their treasury, risk management and compliance teams for managing their currency positions, developing and executing hedging strategies and meeting regulatory obligations.

They are able to do this efficiently and effectively because, from the public cloud, Real-Time – Optimized delivers a zero-footprint stream of real-time FX prices. Companies can choose what their use cases require from our foreign exchange data catalogue, which contains exchange rates for the widest coverage of currencies. Real-Time – Optimized delivers pricing for 175 currencies, from over 2,000 contributors, for:

- FX spot rates
- FX cross rates
- FX forward swaps
- FX fixings
- FX locking rates
- Currency warrants
- Non-deliverable forwards (NDFs)
- FX OTC options
- FX volatility fixings
- FX Volatility Surfaces
- Currency indices

Our forex data is supported by exclusive trading venue pricing from FX Matching and FXall. Matching – a central limit order book – offers real-time credit screening, enhanced price discovery, concentrated liquidity and efficient execution for FX traders. FXall provides active traders with access to deep FX liquidity from more than 200 providers and 2,300 buy-side institutions, with choice in execution across multiple leading liquidity venues.

Connecting payment and money transfer companies' internal systems to Real-Time – Optimized FX data to set rates for customer transactions, manage risk, hedge and trade can take as little as a few hours to setup. This is thanks to industry standard and open APIs using Websockets and languages like Python. High-performance development kits for Java and C++ are also available.

And because of the 24/7/365 nature of the foreign exchange markets, these companies appreciate having robust operational resilience baked into Real-Time – Optimized as well as support services that work the same hours that they do.

"Foreign exchange trading is a fast-moving, rapidly-evolving market and so is the FX payment and money transfer industry," says Eddy. "Our data enables these companies to support their clients in the best way possible, while at the same time managing risk, compliance and their margins."

Conclusion

Based in the cloud, Real-Time – Optimized supports a wide range of today's use cases – of which the above are only a sample. Real-Time – Optimized enables financial firms and companies to:

- Access high quality, normalised real-time data on 90+ million instruments across the widest array of exchange venues and OTC markets from a single ID
- Engage with data aligned to our Data Model, including symbology, which means data can be connected across front, middle and back office use cases, as well as to reference data, machine readable news and more
- Enable the use of constantly evolving computing and analytics capabilities in the cloud, via their preferred cloud provider – dramatically reducing the time and resources needed to work with data
- Use Machine IDs that are not tied to a physical site and can provide flexible access – easily switch applications to a new site or to the cloud
- Receive support from our 24/7/365 global team, and a Professional Services team that understands the needs of firms as they transition to the cloud or operate in a cloud-native way

To learn more about Real-Time – Optimized, visit: Real-Time – Optimized