



Overcoming current obstacles on the path towards true web-based STP FX connectivity



By Nicholas Pratt

The FX industry is unique compared to other asset classes in that it has an unparalleled level of fragmentation and segmentation and simply so many ways of doing things. Similarly there is a huge variety of participants in the market, all with different motives, from the high frequency hedge funds looking for arbitrage opportunities among global currencies to the corporate treasurers needing to pay bills in various currencies.

As with other asset classes there has been a large take-up of electronic trading. Thanks to the advancement of internet-based technology there are now options beyond the single bank entities that existed in previous years. Multi-bank portals have sprung up with increasing regularity over the last ten years including a number of targeted platforms aimed at the various different participating groups.

Not only is there fragmentation and segmentation in liquidity sources, trading platforms and participating groups but this fragmentation is also increasing. Added to all of this is the increase in the sheer volume of trading in the FX market.

Achieving STP

All of which makes connectivity and straight through processing that much harder to achieve. “The volume of real electronic trading has gone up substantially in the

last few years,” says Jay Hurley, vice president for Morgan Stanley’s fixed income division and also co-chair of the Global Foreign Exchange Committee at the standards body FIX Protocol.

In the interbank market as much as 30% of trading volumes are done electronically through platforms such as EBS and Reuters, says Hurley. “So there is a large amount of STP already happening in the market, at least in the simple case between single entities and on vanilla products like spots and outrights.”

Where connectivity becomes more of an issue is in the less vanilla areas – where there are more complex trades, where liquidity is more isolated and less visible and on the post-trade side with confirmations and give-ups where there is more divergence in the market. “Some firms are more electronically enabled than others. Some are very electronic while others are still emailing



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spreadsheets with the allocations on them.” Hurley says that this disparity need not be an obstacle to connectivity, although it does create a need for more standardisation – something which Hurley has a keen eye on due to his role in the FIX Protocol body.

Pre-trade vs post-trade

As Hurley has stated, the current connectivity issues lay mainly on the post-trade side rather than the pre-trade side. There is less of a



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need for pre-trade tools because of the fact that FX trades work on a request basis and if you don’t have an order, you don’t have a price – unlike a listed stock. ,

“On the pre-trade side the FX industry is in pretty good shape,” adds Fared Naib, president of FNX Software. “The reason is clear – any connectivity bottlenecks will be immediately visible to the customer.”

In the last couple of years, says Naib, FX customers technology expectations have risen to equal that of the equities market, which in turn has spurred on the platform providers to increase the their own investment in technology, however this investment has mostly been on the pre-trade side and the post-trade side has not come quite as far along the electronic development cycle. “The average customer tends to focus on pre-trade side where speed and reliability is vital. As a result many platforms still offer only batch methods of post-trade connectivity. But this is changing quickly,” adds Naib optimistically.

One of the issues with post-trade connectivity, according to Morgan Stanley’s Hurley, is that there are so many trading platform options, all with a different way of doing things. “There are the single bank platforms and many of these provide post-trade allocations through a graphic user interface (GUI), which still involves a manual process on the client’s part that allows them to have control over their own allocations. This is a step in the right direction and

better than simply using the phone but it is still a different way of operating in comparison to some of the multibank platforms.”

Buy-side vs sell-side

It is a general assumption that the buy-side lags behind the sell-side in terms of their technology development and the adoption of electronic trading platforms and standards and, generally speaking the same is true in the FX market.

However, both the buy and sell-side have their own connectivity challenges. At the simplest level the sell-side banks have to come up with standardised offerings for their clients while the buy-side has to ensure connectivity with all of the different liquidity pools and platforms out there – a task made harder by the fact that many buy-side players do not have the time, budget or personnel to develop their own trading, risk management or connectivity solutions.



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Laurent Useldinger, chief executive of Ullink. “What we see at the buy-side level is that there are some firms which are really big and have an IT department large enough to solve some of the issues or else they buy packages with a front-end screen that will cater for multi-asset class data.

“Alternatively there are the medium to small-sized firms that will not be able to access an API by themselves and will need to buy a third-party system or involve consultants whereas the sell-side already has the resources and capability to connect to these APIs. The more liquidity pools there are, the more complex the connectivity becomes.” says Useldinger.

Vendor solutions

But one man’s challenge is another man’s opportunity and the growing need for connectivity solutions in the FX market is good news for the vendors – even those who do not have a background in the FX market. One of these is French-based GL Trade which has up to now concentrated on developing trading systems for buy-side firms in the equities and derivatives market.

“We see a growing need for customers to have multiple-asset platforms and we feel that the FX market is growing very rapidly,” says Philippe Rapp, executive vice president of strategic development at GL Trade. “There are more and more liquidity pools creating an exchange-like environment and in five years time I think FX will become a very strong asset class.

Philippe Rapp

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Rapp sees both similarities and differences between the FX and equities markets. The similarity lies in the use of electronic trading, the need for complex protocols, increasing levels of market data and the issue of low latency.

“The volume of data is going to go up and the availability of that data is becoming more important,” says Mark Akass, chief technology officer at network provider BT Radianz. “This puts more focus on the reliability and reduced latency of networks. Firms are adopting more advanced trading strategies



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and this means they are looking for fractional differences in performance so providers have to deliver the data very fast.”

“It is not so much that clients have a higher expectation in terms of the delivery of that data – it is more that without reduced latency, clients face a real risk of missing out on trades. Right now there is a lot of latency arbitrage and that will diminish in the coming years as the general efficiency of the market grows. The market is rapidly changing, there is a lot of technology innovation going on and firms have to invest a lot to keep up.”

“As technology providers, we are certainly seeing increasing demand from customers to reduce latency, increase throughput and show data in real-time,” adds FNX’s Naib. “This demand is what drives improvements in technology - for example, convincing providers to replace antiquated batch-processing systems with real-time, capable systems.”

In fact the growth of algorithmic trading within the FX market, albeit those that are using algorithms on a multi-asset class basis and including FX within that, is seen by some as an important catalyst in the improvement of connectivity for FX. As Akass of BT Radianz states, algorithmic trading in FX is still fairly low at the moment – probably below 15% - but as it becomes more prevalent and drives participants towards a high availability infrastructure, connectivity becomes more important.

FIX and FX

One milestone that neither the equities nor FX markets have managed to achieve so far is the adoption of uniform standards – something that would immeasurably improve the state of connectivity in the market. This is not to say, however, that there has not been progress and at least signs of a move towards a consensus.

Largely speaking this consensus concerns the industry's adoption of the FIX protocol. "FIX has had a huge amount of success in FX," says Hurley who as co-chair of the FIX Protocol's Global Foreign Exchange Committee has been encouraged by the adoption of FIX among the platform providers."

"There's no question we're moving quickly to standardize connectivity protocols," adds Naib. "As we add new connectivity partners, I'd say that almost 80% of them want to use FIX which speaks well for the robustness and convenience of the FIX protocol itself."

It is a view supported by Bill Specht, director of systems architecture at FX trading platform Currenex. "At Currenex we support the move towards this environment and the growth of FIX. When we started at Currenex, every participant had a different connection and had different behaviour. FIX has brought standardisation to the market and made it much easier to support a diverse client base."

According to Specht, who is also another co-chair of the FIX Protocol Global Foreign Exchange Committee, much of the progress

that has taken place with FIX in the FX market can be traced back to two years ago when a consensus was reached between the three major standards bodies – FIX, FpML, a variant of the XML format developed specifically for market data, and TWIST,



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developed by corporate treasurers active in the FX market – as to where they should concentrate their efforts. "We agreed to look at what FIX can do," says Specht.

The result of this consensus was the release of version 5.0. "The 5.0 spec goes a long way to solving many of the issues of FX over FIX," says Specht. Despite the fact that FIX has been used in the FX market for some time now, there has never been any user guidelines published meaning that there was often disparity in the way the protocol was used. But, says Specht, with the 5.0 release there is now a comprehensive user guide specifying the best practice for using FX with FIX.

FIX Fast protocol

The other focus for the standards body is the continuing

development of the FIX Fast protocol, which has been designed to cater for the increasing volume of market data in the FX market. As Ullink's Useldinger says: "There is a lot of volume going down those pipes and when it comes to market data, FIX might not be the most appropriate protocol.

"FIX is very good for order flow because that is a mechanism that is not very bandwidth consuming. At the time that FIX was conceived we did not have the volumes that we have today – it is no longer appropriate in that original format because with the growth of algorithmic trading you need low latency at the data level and larger pipes because it increases volumes on both the market data side and the transaction side. This is why I hope something like Fast FIX will come in."

Most ECNs or FX platforms have one channel for the order flow, which is typically FIX-compliant, and another for streaming prices, which is typically not FIX-compliant, says Useldinger. "This creates a challenge to find a harmonised way for all participants to connect to the ECNs and platforms to receive market data. That is not happening today.

Although hopeful that Fast FIX will be widely adopted, Useldinger has seen no evidence thus far to suggest this will be the case. "We don't see any initiatives at all around Fast FIX and we don't see it being adopted by the market at all in any asset class."

He puts this down to the fact that Fast FIX compresses the message

flow but only reduces the bandwidth requirements of market data by half, which he says is simply not enough. “We need a standard that does better than this and at the moment there are no standards for streaming prices.”

Hurley is well aware of the timeliness of the launch of Fast FIX, believing it has come at exactly the right time for the FX market, even though it faces some significant challenges. “The problem for the FX market is that there is no single price for products as there is in other asset classes. With decimalisation, it is easy to get 10 different quotes for a Euro trade. So even though there are a limited number of products, the fact that you can get so many prices for each one means that there is a lot of data to merge together to get a real view of what the current price is.”

Streaming prices and the general execution of trades is only one part of the work being done with FIX and the protocol group’s members, says Hurley. The next stage is the post-trade side. “The first phase of FIX for FX looked at requests for quotes, streaming prices and completing the trade. That was completed at the end of 2006 and the focus for this year is on allocations, confirmations and give-ups.”

The future

For other providers in the FX market, the future challenges around connectivity concern the continuous battle to cater for the market’s historical fragmentation yet also keep pace with the constant development. “Historically, different sectors of the industry - execution providers, account

custodians, prime brokers, and so on - have built completely disparate systems to handle specialized tasks; but now, the distinction between these sectors is blurring,” says Naib. “Over the next ten years, almost every player in the FX space is going to have to start providing real-time, user-friendly solutions that can handle very high volumes of trading activity.”

Consolidation will also increase among the FX market’s providers and participants complicating connectivity yet further, “therefore agility in providing ongoing connectivity and a continuity of service amid the market’s development will be key”, says Akass of BT Radianz.

It is this ability to provide technical solutions yet navigate the market’s more commercial developments that are key in many industries but also lie at the heart of the connectivity challenge in the FX market believes Mike Hepburn, senior business development executive at GL Trade, the relative newcomer to the market. “I think the future challenges will be more commercial than technical. We know what the end user wants – they want an aggregated view of the market’s liquidity. But we are exchange-agnostic and we are must comply with the views and wishes of each exchange. “We know that aggregation is strongly resisted by the various exchanges because they do not want their prices to be anonymously co-mingled with the prices of other exchanges. So there is a contradiction in the market where the users are asking for one thing and the exchanges are giving

them another and we’re in the middle trying to keep both sides happy. It is something that will solve itself over time and we are not going to try and force the issue.”



Mike Hepburn

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“There is no single model that caters for everyone’s needs,” concludes Hurley, highlighting what makes the FX market distinct from other asset classes where the exchange model is more prevalent. “This is not to say that the exchange model won’t grow and it may be particularly suitable for the high frequency hedge funds. But there is no one answer and we will continue to see a number of different methods and platforms because there is currently enough growth in the market to support all of these platforms.”

“The real issue is the fragmentation,” says Hurley. “There are different users with different requirements and this will continue. New platforms are announced all the time because people want to innovate. So the challenge is to understand the market structure and the different ways there are available to execute trades.”