

The Challenges of FX EMS Selection and OMS Integration for Asset Managers

By Richard Estes, Founder and President of eFX Consulting



Richard Estes

The Finance Hive, a networking organization supporting the global buy side trading community, recently published the second report in a series entitled “Global Pulse: FX Platforms”. This report, based on the views of key decision makers for FX for North America-based asset managers,

follows an initial report published last summer incorporating the views from their European-based peers. Many in both groups cited a desire to implement a new FX execution management system, or EMS platform, and the top priority in doing so is to have one that offers both “integration and support with existing order management systems”, or OMS. This desire became more pressing this past March as the pandemic forced buy side staff to begin working from home, where many began trading from their living rooms and home offices for the first time. While the various FX EMS platforms performed particularly well when accessed remotely, the surge in trading volumes that occurred during March made the sudden adjustment extremely difficult for many buy side firms as it exposed the inadequacy of OMS-EMS integration. Many traders were reliant upon e-mail, chat groups, and cell phones to collect information on required FX trades and to coordinate their execution amid an increase in market volatility and thinning of liquidity.

The experiences of March have clearly identified for many asset managers the work that needs to be done in order to automate their FX workflow. But is it that straightforward a task to do?

The evolving FX trading needs of asset managers, particularly those of real-money asset managers, have made OMS integration challenging for a number of reasons. Foremost is a desire to implement new EMS platforms that incorporate more advanced trading methods, such as access to streaming liquidity, use of algorithmic execution tools, and interaction with non-bank providers. Offsetting this desire however is a need to retain functionality provided by legacy multi-bank FX trading platforms, such as portfolio-based

trade execution with account allocations, flexible trade requirement netting, and cross-currency netting.

To understand the challenge of OMS-EMS integration for FX trading, it is first necessary to understand the role in FX trading that both an OMS and FX EMS play. Second, FX EMS have evolved over the past two decades since the advent of electronic FX trading, and the desire to incorporate more automated methods of execution has not always been easy to achieve while retaining traditional FX EMS functionality. Finally, the replacement of an FX EMS with another one is not necessarily straightforward, due to the interoperability between the OMS and the old FX EMS that may be different for the new FX EMS.

OMS – FX EMS WORKFLOW

The OMS is designed to support the investment lifecycle, which includes portfolio modeling, trade generation, cash management, and compliance modeling across asset classes. FX orders that are created by the OMS are typically the byproduct of investment activities, such as the settlement of securities trades, bond redemptions, and income collection, all of which create cash flow events. These cash flow events are viewable via a cash ladder which shows the funding needs, per currency, across future dates for each fund. The OMS has the ability to create an “FX order” for each cash flow event, which then can be sent to a connected FX EMS.

The FX EMS is responsible for taking these FX orders, also known as trade requirements, and using them to construct a portfolio, or block, of trades. These portfolios will contain FX trade requirements with similar attributes – same currency pair, same dealt currency, settlement date(s), and

BUYSIDE CONSIDERATIONS



fund name(s). To the extent that funds included in the portfolio permit netting, the purchase amount of a currency by one fund can be offset by the sale amount of that currency by a second fund. Once the portfolios have been staged, the asset manager's FX trader can choose the method of execution that the FX EMS supports: request for quote (RFQ), request for stream (RFS), executable streaming price (ESP), algorithmic execution, or WMR fixing.

EVOLUTION OF FX EMS

First-Generation FX EMS

The first generation of FX EMS, launched during the early 2000s, were designed to automate the creation of these portfolios. The original FX EMS, FX Connect and FXall, had the ability to import trade requirements and classify them as either spot, outright, or swap trades. Portfolio grouping rules allowed trade requirements to be netted, both within a fund and across funds, by currency pair. This aggregation enabled a portfolio's

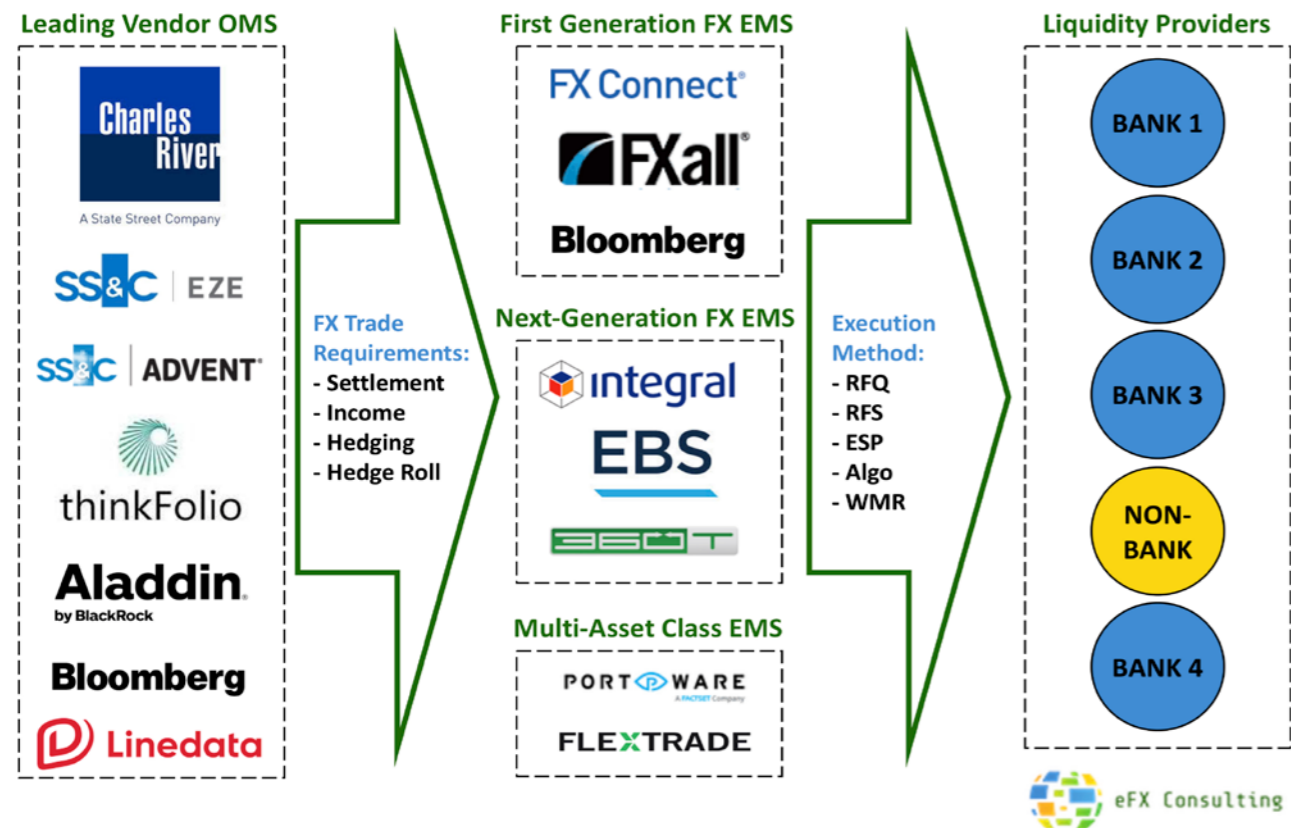
trade requirements to be priced in a consistent manner using a common spot reference. While these trade orders were designed to be transmitted as an RFQ to a bank's sales desk for manual pricing, technology soon enabled them to be priced electronically as an RFS by a bank's rate engine, with the resulting account allocations passed to the bank's back office system.

Next-Generation FX EMS

During the mid-2000s, bank rate engines for several Tier 1 banks evolved into an equities-style execution method, offering ESP, based on depth of book liquidity, via their single-dealer platforms (SDP). While ESP quoting was viewed by many buy side participants as highly desirable versus RFQ or even RFS, it was not accessible to asset managers who traded FX across numerous funds and were reliant upon the trade workflow established by FX Connect and FXall. Meanwhile, the original technology

frameworks for FX Connect and FXall did not enable them to implement ESP-based pricing for their portfolio trading. New FX EMS were developed during the early 2010s that strived to solve this problem. Two such platforms, InvestorFX from Integral and InstiFX from Molten Markets (now EBS Institutional from CME Group), implemented more equity-style trading tools built on top of the workflow functionality used by FX Connect and FXall. Due to their connection to sister ECNs, both platforms incorporated live market data which supported pre-trade "Expected Cost Analysis" (ECA), allowing an asset manager's FX trader to analyze alternative execution methods supported by the platform. The execution methods included both the traditional RFS as well as ESP and algo-based execution. Additionally, EBS Institutional included transaction cost analysis (TCA), commonly used in equities trading, to evaluate the quality of execution across various liquidity providers.

OMS – EMS - LP ORDER FLOW



BUYSIDE CONSIDERATIONS

Multi-Asset Class EMS

As equities-style trading methods debuted in FX EMS, existing equities EMS began to challenge the FX EMS as well and expanded into additional asset classes, including FX, with the goal of providing a multi-asset class EMS to asset managers. Two such EMS, FlexTrade and Portware, reckoned that traders from asset managers would prefer to operate a consolidated platform for all of their trading activity, with the belief that each asset class would adopt similar trading methods. While rich in execution tools, these platforms had to develop the workflow functionality of an FX EMS, namely the ability to group FX orders received from an OMS into portfolios, enable account- and portfolio-level netting, outright and swap pricing, and passing of allocations to an LP.

WHY REPLACING AN FX EMS IS NOT THAT SIMPLE

While many asset managers may wish to implement a new FX EMS, some may find it difficult to do so for numerous reasons:

- **Workflow support** – a new FX EMS may not be able to support an asset manager’s workflow the way that the existing one does. For example, it may lack netting capabilities, or specific controls on how to manage netting.
- **Liquidity provider support** – not all of an asset manager’s LP’s may be able to support the different workflow of a new FX EMS. While an asset manager may desire to trade with a non-bank LP, workflow considerations may prevent that.
- **Regulatory reporting capabilities** – a new FX EMS may not operate as a SEF or MTF and therefore be able to provide necessary trade reporting, for example under MiFID. Instead,

this reporting may need to be supported by the OMS.

- **OMS integration method/support** - while many FX EMS integrate with the leading OMS, a new FX EMS may integrate differently with an asset manager’s OMS than the existing one, due to the method of interface used (FIX/ web service/file) and the fields and message types supported.
- **Limitations of OMS FX trade origination** – an OMS may be limited to supporting the investment-related activities managed by the OMS (e.g., securities trading and settlement, bond redemption, portfolio hedging). Other investor-related activities that also generate cash flow activity for offshore funds (e.g., transfer agency, share-class hedging) may occur outside of the OMS.

THE REALITY OF OMS-EMS INTEGRATION

While many asset managers wish for better OMS integration with their chosen FX EMS, in reality integration already exists. An informal survey of several FX EMS platforms state that they are integrated with leading OMS platforms, many of which are listed in the accompanying diagram.

The OMS is the “backbone of an asset manager’s systems architecture”, says one product manager from a leading OMS vendor, and “touches on so many aspects of the trading lifecycle”. As such, selection and implementation of an OMS is an “enterprise decision” around which all other technology choices, including an FX EMS, are based. As a result, FX EMS is dependent upon the capabilities of the OMS, which may limit supported functionality. For example, some OMS have the ability to create FX orders, or pass fields describing the underlying reason for the

FX order (e.g., bond trade, cash inflow) while others may not. As a result, integration between a particular FX EMS and different OMS can vary.

Subsequently, many asset managers have chosen to implement a second FX EMS, due to the fact that there is no one FX EMS that is considered best in breed across all desired functionality. While some FX traders will prefer using a platform such as Portware, InvestorFX, or 360T’s EMS that can support more automated trading, the first-generation FX EMS such as FX Connect and FXall now also include algo-based trading.

Meanwhile, there is still a need for more manually-controlled FX trading. For example, many of the largest asset managers still continue to use FX Connect as a means of executing restricted currency trades with a custodian bank as such trades cannot be electronically priced immediately. Indeed, a senior portfolio manager at Dimensional Fund Advisors says he uses multiple FX EMS, viewing them as “tools in a tool box”.

Finally, another important consideration for implementing a second FX EMS, rather than replacing the existing one, is concern over project execution risk. For one, the interoperability between an OMS and different FX EMS can vary. Two, the way that a particular LP supports one FX EMS versus a second FX EMS can also vary, particularly when it comes to post-trade processing of trade drop copies. Because the FX EMS sits in the middle of the OMS - LP workflow, there are both upstream and downstream considerations to anticipate. When addressing the desire to replace an FX EMS and achieve better integration with their OMS, asset managers need to balance their objective for more automated trading with the need to maintain established trading workflow practices.