

The commoditization of the FIX engine



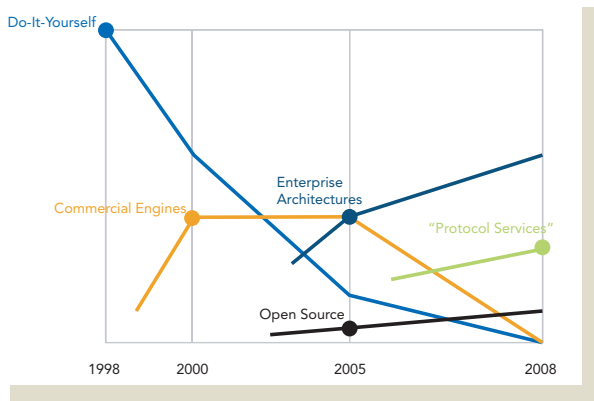
By Sam Johnson, CEO, TransactTools Inc.

Back in the summer of 2000 I wrote an article stating that the FIX engine was fast becoming a commodity product (you may not have recognized me, I had a little more hair back then). I suggested that the industry would benefit from an open source FIX implementation because that would eliminate the biggest barrier to FIX adoption at the time, price.

That article generated an awful lot of flak for what I thought was a relatively straightforward observation. But to a vendor, “commodity” implies non-differentiation, which implies pricing pressure, disappearing margins... all manner of horrible things. Never mind that I was a vendor too.

Now it's five years later, and quite to my surprise a few FIX engine vendors are still kicking along, giving it the old college try (some even still “emerging as the global leader”

after all that time, if you can believe it!). But take a look what's really happened over the past five years. Any vendor lucky enough to see the RFPs from the big boys today knows full well the leading firms in the industry have moved quickly past FIX engines and are looking for solutions that are much bigger and much more business-focused. QuickFIX has emerged as a perfectly good open source FIX implementation, and some commercial software vendors (including ourselves) have signed up to contribute code.



There are really five classes of protocol messaging solution, each at a different place in its useful lifespan. They range from build-it-yourself (the only option in the early days of FIX) all the way to emerging "protocol services" which won't really make it to prime time for another twelve to eighteen months. At any point in time a few of these options dominate the market.

Today is a particularly interesting time, because with new classes of solution emerging and old ones still gasping along, there are more strategic choices available to a firm than there have ever been before. At once, we see commercial FIX engines being sold to smaller firms just getting started with FIX, enterprise messaging architectures being deployed by the more sophisticated shops, some experimentation with open source code, and even a handful of proprietary FIX implementations still in production. But yesterday's leaders will be dead tomorrow. Like any standard, FIX will fade into the woodwork until it's barely noticeable.

Where are all the TCP/IP engine vendors today?

That the FIX engine is getting lost in the shuffle is good news for FIX. This is what happens with every successful standard, from HTTP to mp3. An excellent example is the original Internet protocol itself, TCP/IP. Remember the early days of networking, when the Novells and Banyans all competed for a toehold in the promising yet immature enterprise networking market? Remember IBM Token Ring? TCP/IP won the networking battle pretty easily, largely due to its unfair advantage as the networking protocol of choice for the Unix operating system, which was the operating system of choice for the computers that powered the up-and-coming Internet.

The emergence of TCP/IP and the Internet is not what killed Netware and Vines, however. Netware and Vines were the protocol engines of their day. What killed and buried them was Microsoft's decision to embed TCP/IP support in their Windows operating system. Mean-spirited, heartless, and downright evil as it was, it was also very smart, obvious, and in the best interest of the end-user.

And thus nobody is in the market for a TCP/IP engine today, and I'm not sitting in a hotel writing an article for TCP/IP Global. (Thank goodness, don't know where I'd find the time.)

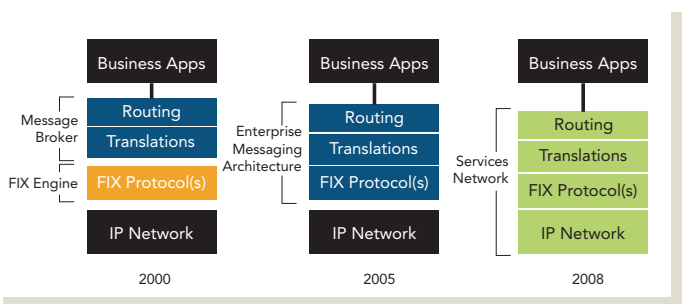
Operating systems for electronic trading

Electronic business in a global financial firm is much bigger than a desktop operating system like Windows. It spans many business applications from front- to back-office, typically running on many different platforms and often in many different countries. The infrastructure that connects all these components has to be reliable, scalable, multilingual, and increasingly fast. The operating system services that an environment like this requires include things like transactional messaging, translation, monitoring, analysis and decision-making tools, flexible routing logic, transaction repair and real-time management, security, auditing, exception management, alerting... the list goes on. Oh yes: and under all that, support for various messaging protocols. FIX being one of them.

In a really general sense, the connectivity operating system sounds a lot like a feature-rich network, doesn't it? One that provides not only physical plumbing but also the kinds of services mentioned above-so that enterprise applications can just "plug-in" and be connected.

The reason that the commercial FIX engine market is in a fast tailspin is simply that a better-and broader-class of solution is emerging to take its place. The FIX engine provided the market with a standard messaging interface but it didn't solve the real business problem of brokering transactions among business applications. That part was left with the customer, and as the complexity and sophistication of trading environments continued grow, it became a more and more difficult part to manage. What was required in a complex environment was a messaging architecture that could integrate all business applications in a consistent and scalable way, and provide the right

services for connectivity, security, and management-in effect, an operating system for connectivity.



This new class of messaging solution, the Enterprise Architecture, represents the first stage in FIX's disappearing act. Point solutions converge into broader, more scalable, and more general-purpose platforms. Firms realize that they need not only FIX capabilities at the edge of the firm but also internal messaging standards, and a global architecture for delivering and ensuring the integrity of transactions. And why can't all these capabilities exist in a single platform? They can and should.

The FIX engine still exists as part of the commercial solution, but it's not called a FIX engine anymore because FIX Protocol support is only one of the many services it provides.

The next logical step is pretty obvious, although not trivial. The next step is bundling these capabilities directly into the network infrastructure that connects business applications and also financial firms to each other. IP network providers like BT Radianz have already begun to announce that transactional services will be delivered as part of the network, and it makes perfect sense. If the network can monitor itself, that provides an awful lot of value to the customer because it removes that burden from him. If the network can notify the customer when something needs attention, or even allow the customer to define what constitutes acceptable performance at both a network bandwidth and also an application (FIX) messaging level, then the network itself becomes an integral part of the Enterprise Architecture. And if the network can be smart about the transactions and messages its carrying, why not provide routing and translation services as well?

We are making big investments as a company in working with partners like BT Radianz and Cisco to embed business

intelligence in the network itself. FIX is a unique protocol because it is squishy and the business it communicates is stateful. The right long-term architecture will incorporate transactional capabilities in the network without compromising the flexibility and control of the end user.

Going, going,...gone.

The inevitable commoditization of FIX is the result of a natural, business-driven convergence of technologies-but convergence at the right place, which is the "operating system" layer beneath the business applications. Microsoft embedded TCP/IP support in the Windows operating system and the market for networking software vanished in a puff of smoke. The same thing wouldn't have happened if Microsoft had decided instead to embed TCP/IP support in, say, Word. That might have been convenient for a handful of Word fanatics-until someone turned them onto PowerPoint. A lot like bundling a FIX engine with an OMS, it's the difference between a stand-alone application and an operating platform for all applications.

We won't have to wait another five years to see this run its course. Most of the world's leading trading firms are moving to an Enterprise Architecture today, removing point-solution products and replacing them with well-architected infrastructure that will deliver the levels of performance and scalability their business will require for the next several years-regardless what form the next version of FIX takes or whether some completely new standard pops up.

Over the next year BT Radianz will continue to expand its offerings for transactional services on the network, greatly increasing the amount of visibility and control firms have over their connectivity. By 2007, network hardware vendors like Cisco will have built protocol intelligence literally into the network itself, the FIX engine as we know it today will vanish in a puff of smoke, and FIX Global will probably have a different name. **FIX**

Any thoughts on this or other articles?

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