Selling Network Services to the Financial Services Industry

March 10, 2011

Issue

The financial services world is in the midst of an arms race – only in this case traders are seeking to equip themselves with nothing more dangerous than the fastest possible connections to exchanges and markets data feeds. This has forced network operators into a stand-up fight to host the exchanges that facilitate these trades, or provide lowest possible latency connections to them in data centers that are as close to the exchange. While in the rest of telecoms world, distance is no longer an issue, in electronic trading, distance can mean delay and lost profit.

As a result, data centers have been positioned as close as possible to major financial hubs such as New York, Chicago, London, Singapore and Tokyo, covering millions of square feet of floor space. Where proximity is not an option, traders are offered high speed links to market data feeds and trading information services. Operators are trumpeting the resilience and speed of their networks as latency rates move into single-figure milliseconds. Some are content to provision connectivity from other operators, while those who own and manage their infrastructure use it as a selling point.

Every option for reducing delays is being explored, even to the extent of collaborating with equipment vendors to ensure this high value traffic is not unduly delayed as it passes through their network devices - all backed up by comprehensive service level agreements.

Amid the frenzy to drive down latency rates, it is easy to forget that trades in the OTC market in particular are still negotiated the old fashioned way, trader-to-trader over the phone. But the industry has yet to really ‘get’ voice over IP, preferring in many cases to stick with the devil it knows.

Current Perspective

The cliché ‘every second counts’ has become irrelevant to the world of investment banking, as measuring progress in terms of seconds is of little value to traders who need to capitalise on pricing and trend movements measured in milliseconds. There are situations where traders would rather not trade at all than trade late. As more and more trading is electronic and automated, any weak links that create delays are increasingly the difference between profit and loss. The key driver in this market now is algorithmic trading, which has created exponential growth in trade volumes.

Automated Trades

Algorithmic trading is a process whereby factors such as timing, price or quantity of the order are determined by machine rather than man. In its most extreme form – known as high frequency trading – orders are initiated electronically based on information received electronically, with trends identified and acted on more quickly than is humanly possible.

Regulators frequently express concern that a large percentage of these trades are never actually completed.
and thus distort the market, but in an industry where shaving fractions off share prices can yield massive returns, algorithmic trading is here to stay. The challenge for network operators is to match traders' need for speed, which they approach in a number of ways.

For example, Colt pushes the fact that it owns and manages native Ethernet infrastructure across Europe, and with next-generation Ethernet, can guarantee very low latency for financial customers. While some operators use algorithms to find the best route through their network, Colt dedicates the bandwidth to its customers through the network, emulating a circuit, thus enabling it to reduce its jitter SLA from 5 milliseconds to 0.5 milliseconds.

In contrast, Orange Business Services–Trading Solutions takes the view that while low latency is important, it is not essential to own the fibre connecting it to the client because it is possible to provision fibre from the lowest latency provider. The company still believes its switched Ethernet network gives it an advantage in that it can guarantee that latency rates will remain the same regardless of the level of traffic (e.g., which can spike when the US market opens) or problems with the primary route - by switching to a preconfigured secondary route.

Proximity Preference

Distance is also a key consideration – the closer the customer is to the exchange (in reality, the distance between the data centers hosting the customer's and the exchange's servers) the better – which is why most operators have invested heavily in building millions of square feet of data center space. BT is investing in new data centers in financial hubs such as Frankfurt to meet customer demand.

Savvis has 29 data centres across the world, hosting a number of exchanges including NYSE Euronext, NASDAQ OMX, CME Group, London Stock Exchange, Singapore Exchange, BATS Exchange and BATS Europe.

Colt's 19 data centres are concentrated around the major European exchanges, although its partnership with KVH represents an opportunity to support European and US institutional investor clients planning to enter the Asian market. The company upgraded its network in 2009 and now connects more than 25 of the main multilateral trading facilities exchanges at very low latency – sub-5 milliseconds between Deutsche Bourse and London – and has been looking at options for reducing those speeds still further. Colt's data centres are less than 5km from many of the major exchanges and within 15km of most of the remainder. Network investments by exchanges are further amplifying downward pressure on latency rates. At the start of 2010 the Tokyo Stock Exchange almost halved its order processing times from the previous 5 milliseconds and the Australian Securities Exchange is also committed to installing a new trading platform.

In addition the pace of market consolidation and mergers between exchanges (e.g. London Stock Exchange and Toronto Stock Exchange, NASDAQ and OMX and NYSE is reportedly in advanced talks with Germany's Deutsche Borse) only underline the need to guarantee low latency connectivity between regions to ensure globe global capital flows and high-speed electronic trading.

Data Demand

The relentless growth of electronic exchanges is another factor that needs to be taken into account when investment banks choose a network operator. Electronic trading platform provider Chi-X has been rapidly expanding in Asia and now provides trading services in Japan – the world's second largest trading centre – and Australia. Chi-X and other multilateral trading facilities sell themselves on the basis of lower fees and faster trades compared to the established bourses.

Then there is growing interest in emerging markets, particularly those with liberal trading regimes such as Brazil’s BM&F Bovespa. In Southeast Asia, the Kuala Lumpur, Bangkok, Singapore and Philippine stock exchanges will be linked and the Vietnamese and Indonesian exchanges are ex-
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expected to follow suit in a development that is being closely monitored in Japan and South Korea. Such developments highlight the impracticality of expecting any single network provider to have major data centre facilities at every key location in the developing as well as the developed world - which is where fast and reliable access to markets’ data comes into its own as well as partnerships between operators to share data center facilities.

Savvis is well positioned in this space thanks to its strategic relationship with market data provider Thomson Reuters. In October 2009, Thomson Reuters announced a major expansion of its hosting platform in collaboration with Savvis, providing access to low latency market data, analytics and a data management platform to customers who can have their infrastructure, low latency data feeds and applications hosted and managed within Savvis’ data centers in New York, Chicago, London, Frankfurt, Singapore and Tokyo. For markets not near its data centers, Savvis offers extranet connectivity to market data feeds and trading information services such as BT Radianz.

Voice Vitality

However, this is not to say that voice trading is dead - Orange Business Services-Trading Solutions, BT Radianz and IPC all generate significant revenues from voice services, albeit in combination with data services. Despite increasing volumes of electronic and automated trades, the OTC markets remain largely voice driven with trades negotiated professional-to-professional over the phone.

Orange claims its voice platform guarantees a connection time of 20 milliseconds and can scale to 4,000 positions for a single enterprise user. However, the company shifted its focus from dedicated voice lines to voice and data about three years ago, developing the first switched financial extranet. Voice now accounts for only slightly more than half of its revenue.

As in every other business sector, operators are pushing voice over IP to their financial services clients. But the experiences of Colt in particular suggest that while there is an expectation that the industry will eventually migrate to IP, there is an ‘if it’s not broke don’t fix it’ mentality among financial services companies when it comes to voice services.

There is a push by operators such as BT Radianz and Orange Business Services to IP-enable trader turrets, and give traders the latest unified communications and collaboration tools (e.g., BT has launched next-generation voice trading platform based on SIP and a new collaboration service for trading turrets that provides instant messaging, presence and conferencing features in a pay as you go model). These solutions have to comply with financial services industry requirement to identify and retrieve recorded information.

Among the ‘newcomers’, Indian carrier Tata has reinforced its position as a leading player in the wholesale international voice market with its deal to carry BT’s international voice traffic. The company claims to have around one million square feet of data centre and hosting space across 40 data centres globally.

Tata has every chance of becoming a major carrier in emerging markets, but its prospects of achieving a similar position in Western Europe or North America are much less certain given the level of competition from established operators.

Business Solutions

Verizon is one of these embedded rivals and has recognised that with low latency now a given, the need for service providers to differentiate themselves has never been more acute. Its Verizon Financial Services Network was built specifically for traders, exchanges and information content providers, and comes with a managed services offering based on 100 percent availability backed up with service level agreements, massive scalability, and a usage-based pricing model that will attract new business. Verizon Financial Services Network is aimed at markets in Europe and the
US, where the carrier is particularly strong and has plans to move into Asia. The carrier has some momentum in this space; Nasdaq OMX is now using its US data centres more extensively and has moved its Nordic trading and market data access network to Verizon, which already provided the exchange with professional services, unified communications and corporate network services. Verizon has created a vertical solution practice for the financial sector and has created specialist teams for certain products, including consultants that understand business solutions required across the financial ecosystem.

AT&T is another heavyweight service provider to the financial services industry, particularly in the US. AT&T is keen to move up the value chain to become a trusted partner (e.g., mobilizing business applications, providing managed security services and collaboration services).

This is where professional services and real financial industry knowledge has become critical for operators with higher ambitions to engage with financial services customers on topics such as mobile development of financial apps, compliance management, business resilience and governance and risk management.

### Recommended Actions

#### Recommended Vendor Actions

- **Verizon** is well placed to leverage relationships such as that with Nasdaq, there are question marks around its ability to connect trading floors outside the US and Europe. It would be useful for Verizon to provide some indication of its plans to expand Verizon Financial Network into Asia or other emerging markets.

- **AT&T** should continue to market its ability to deliver fixed and mobile business solutions to financial services customers, although its lack of marketing regarding its financial extranet and trader voice capabilities suggests that this is not something it is really investing in.

- **Orange Business Services-Trading Solutions** has successfully moved from an organisation that was over-dependent on voice revenues to a major provider of extranet services without leveraging Orange Business Services global infrastructure or its data centre network. But its lack of data center space outside Europe is a negative factor for customers trading in the US or Asia.

- **BT** can highlight that BT Radianz managed infrastructure is the world's largest secure managed financial services 'cloud' community, supporting over 14,000 global financial sites, delivering application services from over 400 leading service and content providers and supporting over 60,000 traders. It would also be useful for BT to update the market on trader adoption of IP voice and UC solutions as the year progresses.

- **Colt** has a strong proximity offering, both directly across Europe and throughout Asia via its tie-in with KVH. It has upgraded its network and set some latency rate targets that other operators will be under pressure to match or exceed. However, the company started life as a provider of voice services to the financial sector and needs to talk more about its ability to convert these customers to voice over IP and UC solutions.

#### Recommended User Actions

- End users should ensure that their chosen supplier has data centers and high speed low latency network connectivity, along with the appropriate support infrastructure, in locations with close proximity to their sites in order to maximize data speeds, especially where the user is adding presence in emerging market locations.

- Real world SLA performance, as opposed to what is claimed in the SLA, is becoming increasing critical to the operation, as demonstrated by the recent issues at the London Stock Exchange. Users should ensure that the supplier is truly able to deliver on claimed SLAs.