

The National Stock Exchange Infrastructure and FIX Preparedness

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Topics

- Historical Recap
- NSE Today
- Market Needs
- Infrastructure and Network
- NSE's FIX Preparedness
- Conclusions



Historical Recap

Pre 1994

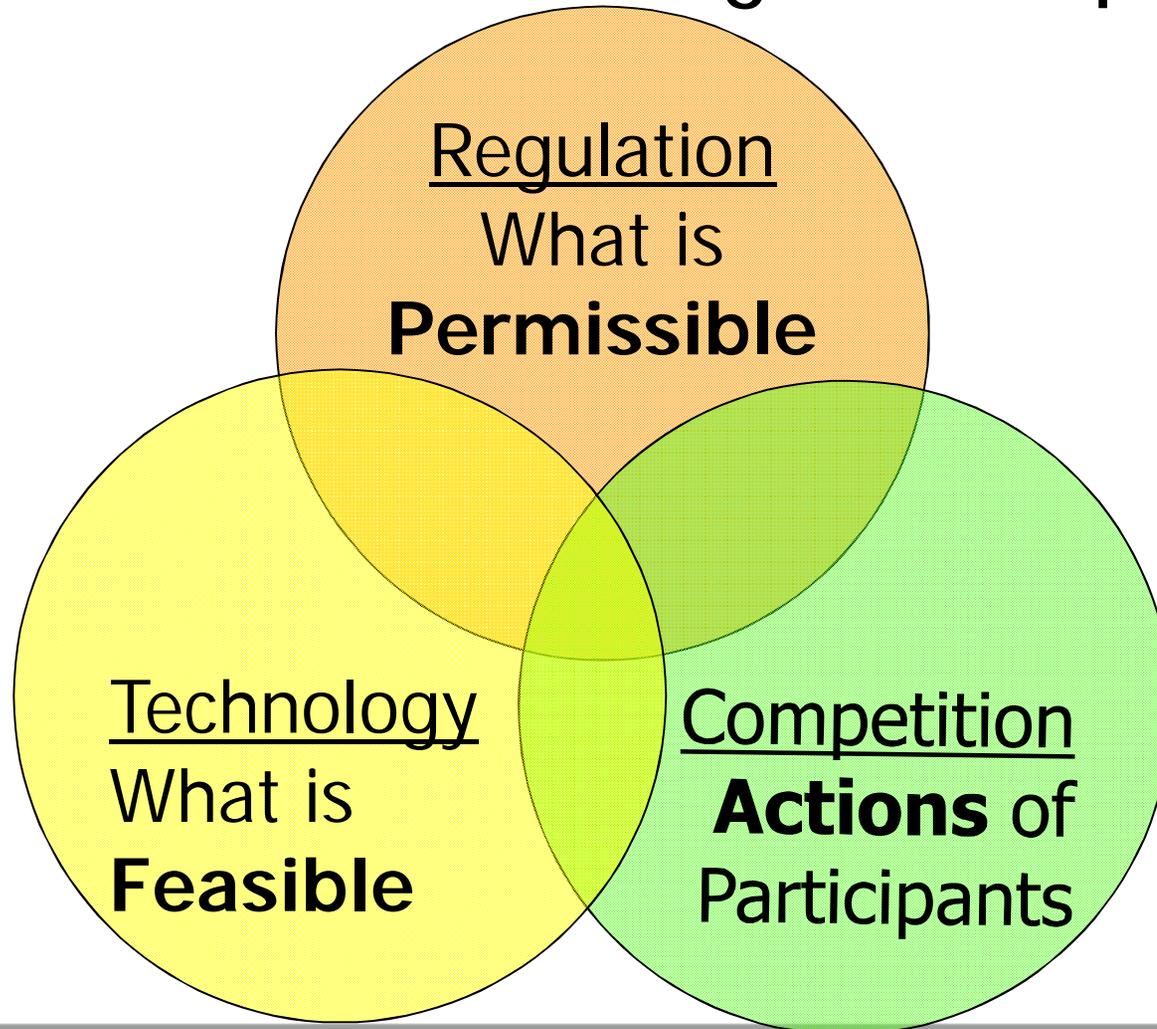
- Low Transparency
- Low Reach
- Weak Risk Management
- Long Clearing & Settlement Cycles
- Paper Intensive
- Physical Share Certificates

Post 1994

- Full Transparency
- Nation Wide Reach
- Real Time Risk Management
- T+2 Clearing & Settlement Cycles
- Electronic Matching
- Full De-materialization
- F&O, Currency & IRF
- Real Time Cross Margining



Three Factors Driving Development





NSE Today

- Nationwide High Resiliency High Bandwidth IP Backbone Infrastructure
- 6,000+ connections (Both Terrestrial and Satellite)
- 1,500+ Locations
- 1,000+ Members
- Processing about 100 Million messages and 10 Million trades every day



Market Needs – Faster, Cheaper, Easier

Product Capability

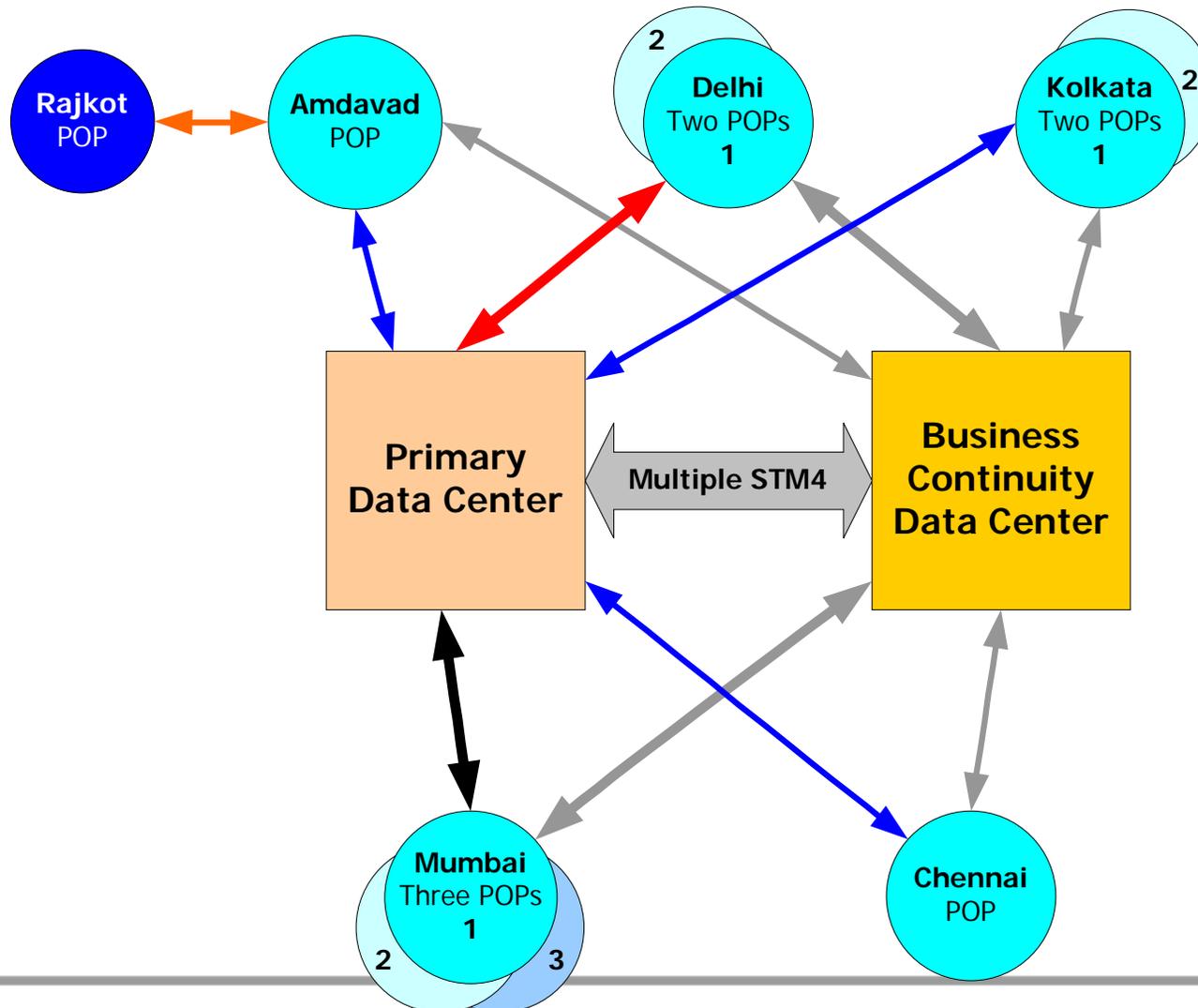
- Transparency
- Rich Functionality
- Liquid
- Depth
- Resiliency
- Low Impact Cost
- Real Time Risk Management

Technology

- Reliability
- Recoverability
- Throughput (Capacity)
- Scalability
- Low Latency
- Wide Spread Reach (Network Connectivity)
- Low Transaction Costs
- Business Continuity
- Business Intelligence

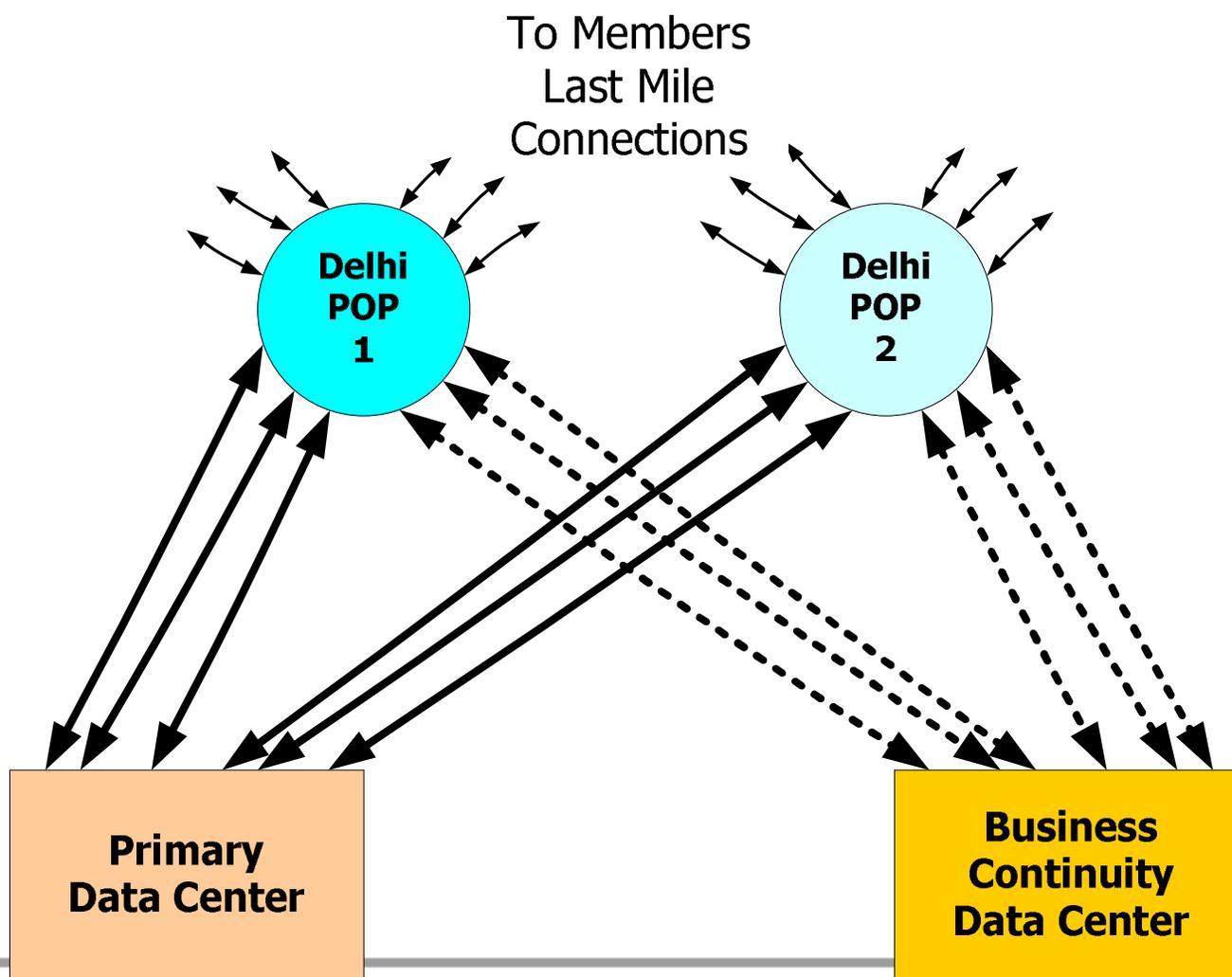


Nationwide POP Topology





POP Connectivity for Members



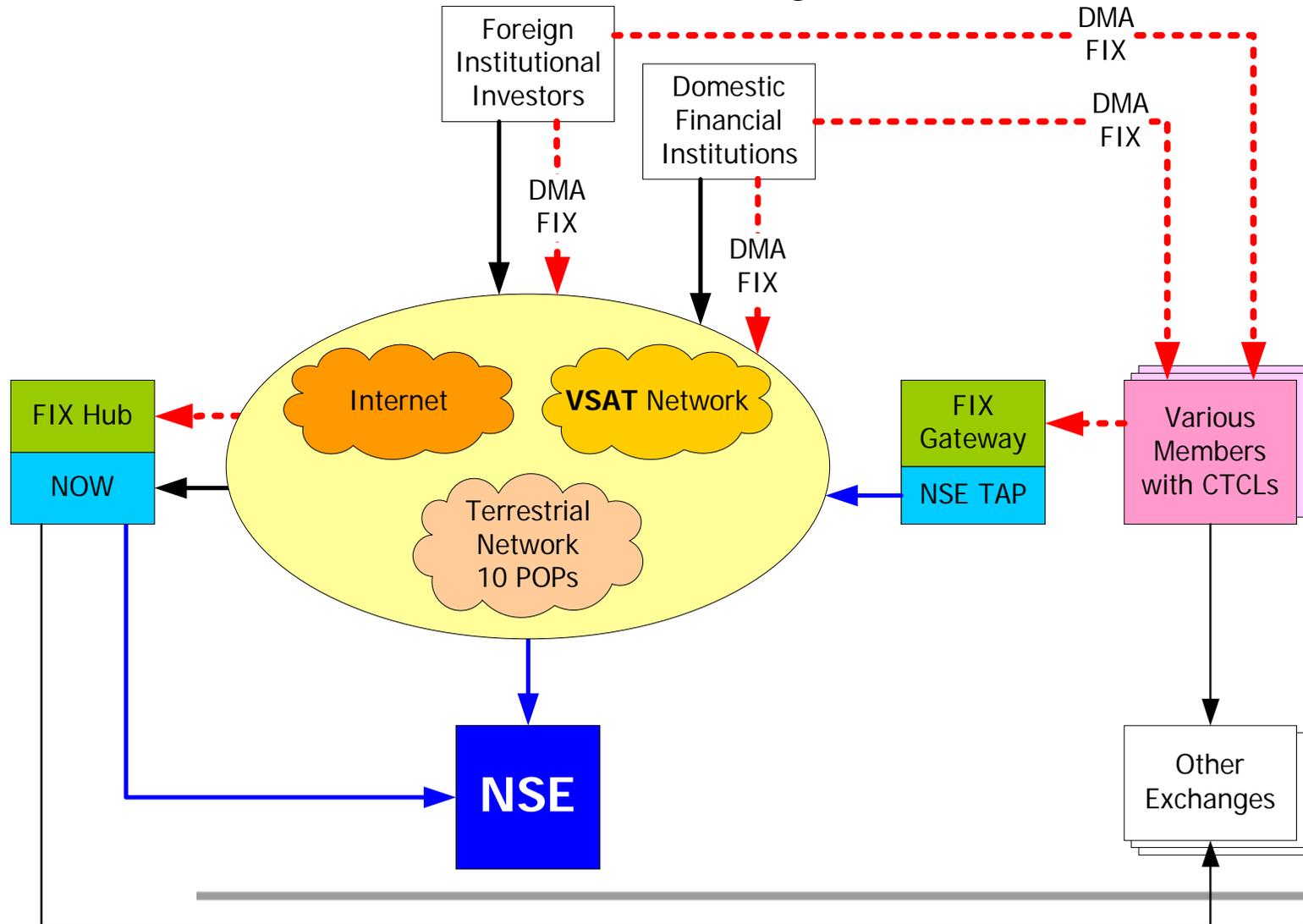


NSE's FIX Preparedness

- FIX Version 4.2 used as it is the current preferred version for Sell Side Firms with plans to move to FIX 5.x as needed
- Minimal deviation from FIX Protocol 4.2
- Specific Custom messages for
 - Multi Leg Orders
 - Exercise of Options
 - Give up reports
- Market data not implemented in FIX, will continue in our current proprietary format
- Beta testing in progress for Cash, F&O and Currency Derivatives segments

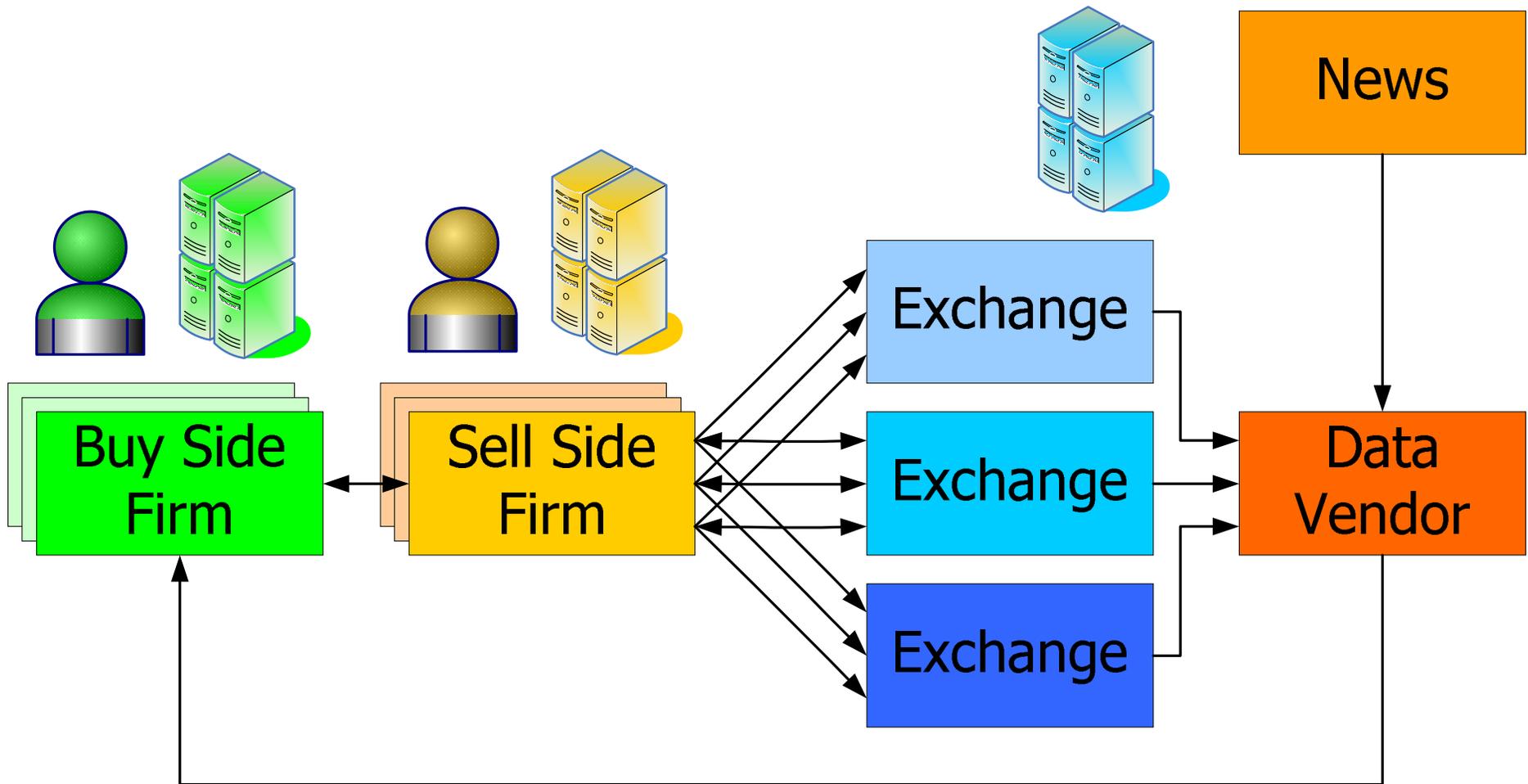


FIX Connectivity to NSE



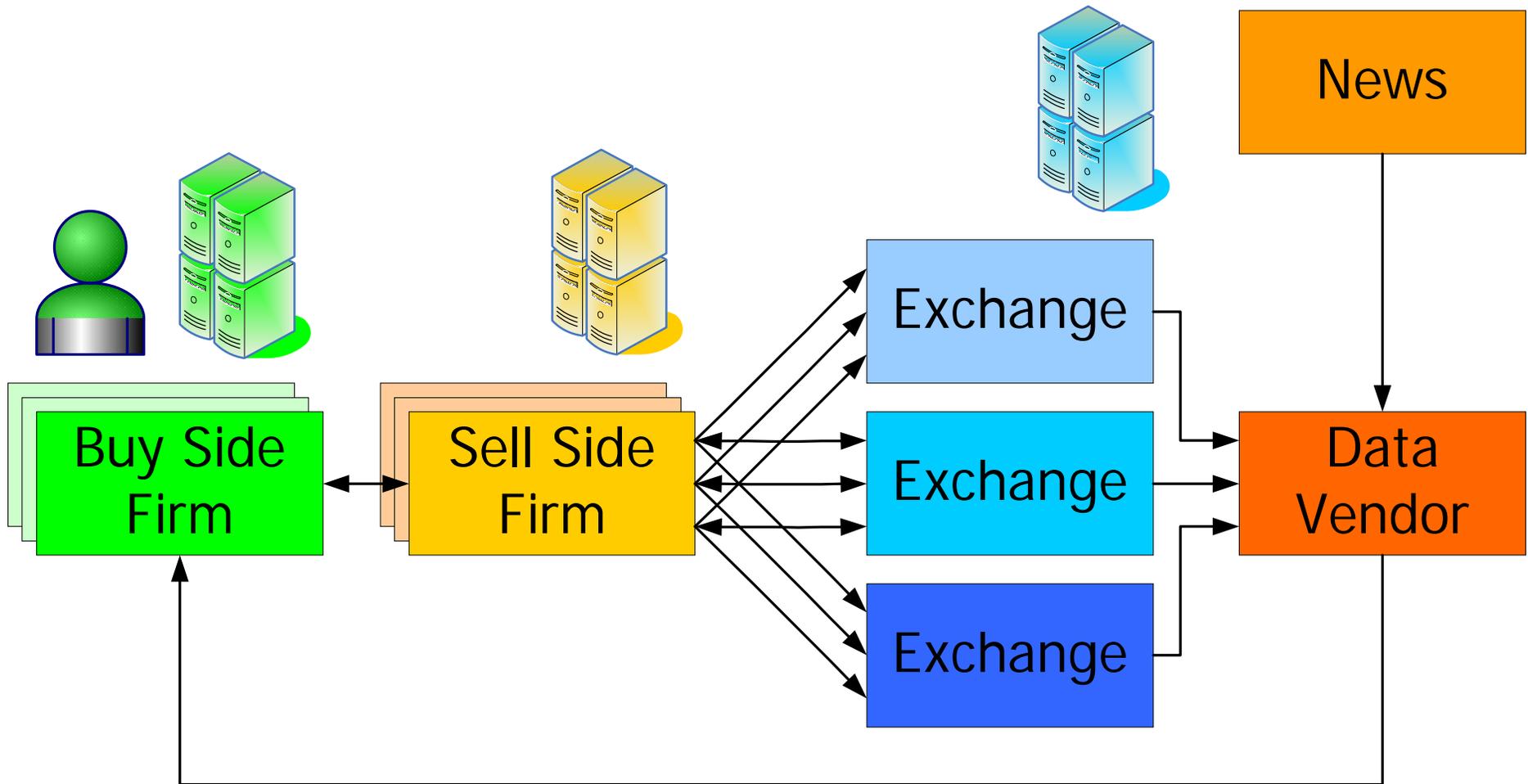


Conventional Flow



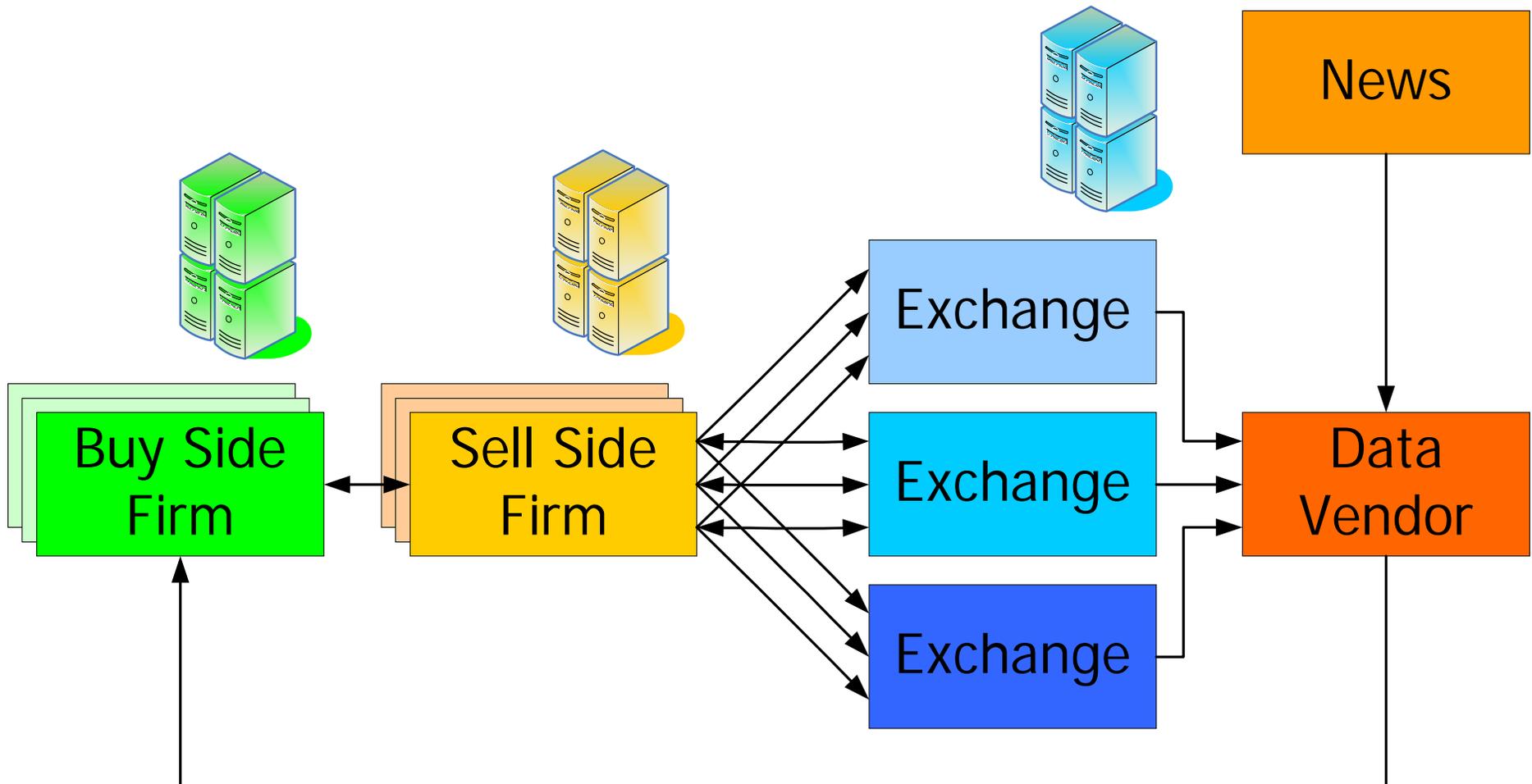


DMA – Direct Market Access



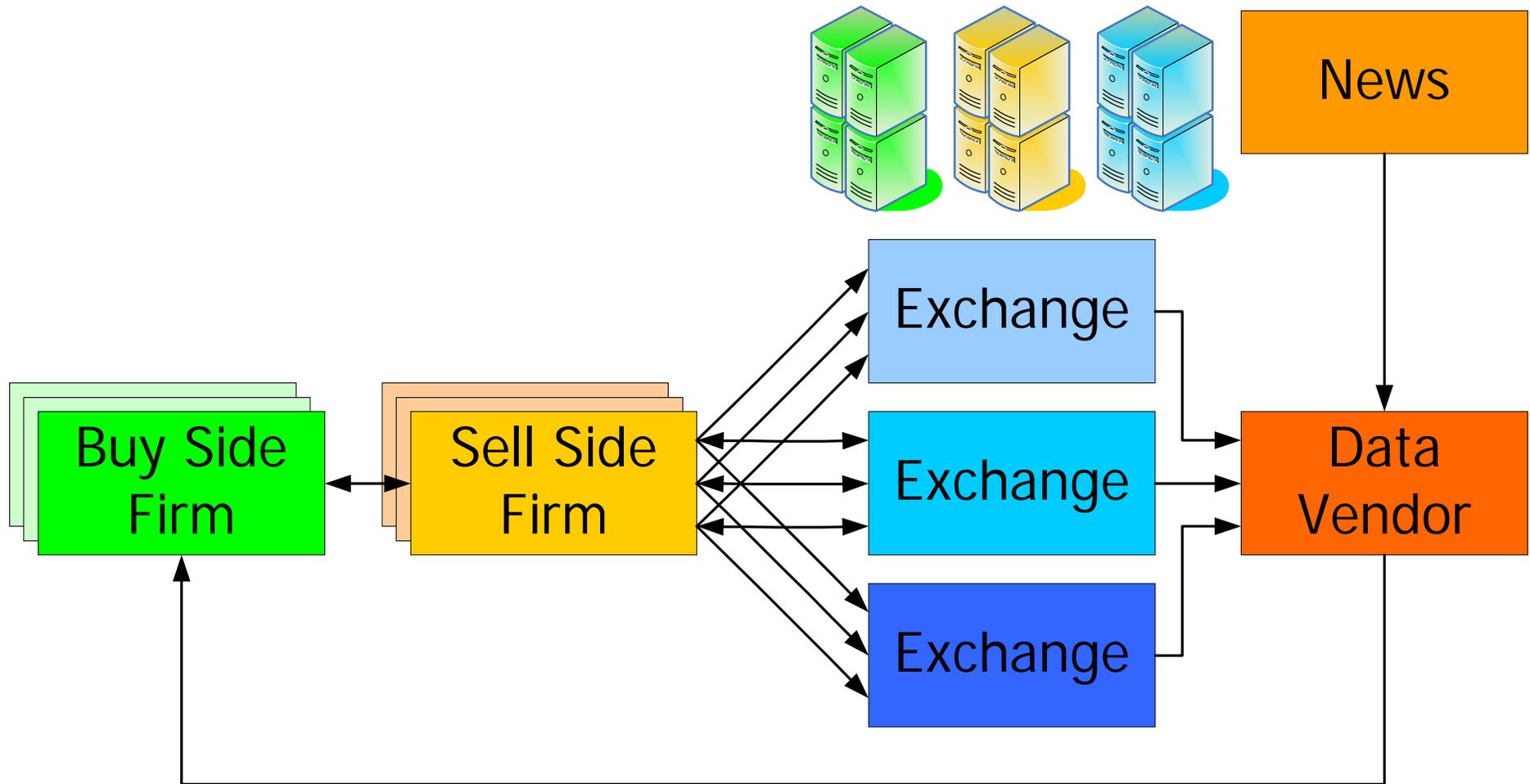


ALGO Trading





Co-Location





Conclusion

- We will continue to bring New and Innovative Products to meet and exceed market expectations
- We will continue to provide Best-of-Breed Solutions to the market participants - proactively and also as requested by the participants



FIXGlobal
FACE2FACE Forums 2010

In support of
FIXPROTOCOL
INDUSTRY-DRIVEN MESSAGING STANDARDSM

Thank You