

FFASTFILL FIX MULTI-ASSET CLASS TRADING & COLOCATION VIA FIX

FFastFill supports order entry via FIX 4.2 and FIX 4.4 to allow clients to connect any in-house front end, algorithmic trading engines or black boxes to over sixty global venues via a single connection.

Orders entered via FIX will also be visible in both the Tracking Pro and Risk Manager systems for full order book and risk management. FFastFill supports full market data via FIX 4.4. FFastFill also has comprehensive tools for the management and on-boarding of FIX connections. Multiple simultaneous FIX connections are supported. FFastFill FIX utilises QuickFIX engine version 1.12.4 to handle FIX protocol logic

and messages.

FFastFill's strategically located, high security Tier III/IV datacentres allow clients to leverage FFastFill's expertise in managing trading applications to maximise performance and availability, and minimise latency by placing spreading and algorithmic tools as close to the exchanges as possible - inside FFastFill's own datacentres.

PUBLISHED FIX ACCESS & FULLY MANAGED COLOCATION SERVICES

- ▶ Product Data Messages
 - o Security List Request Message
 - o Security Definitions
- ▶ Order Messages
 - o Submit Orders
 - o Describe Orders
 - o Adjust Orders
 - o Pull Orders
 - o Request Status of Order(s)
 - o Support for multiple order types
- ▶ Post-Trade Messages
 - o Position Maintenance
 - o Collateral Management
- ▶ Market Data Messages
 - o Price Feed
 - o Market Depth

Fully resilient for high availability at physical, hardware and application layers, the infrastructure has been designed and engineered for service delivery, service availability and low latency.
- ▶ FFastFill's hosting solutions provide a single point of contact for networking, security, OS, Citrix, application & exchange connectivity and are backed by Service Credit SLAs.
- ▶ FFastFill manages the exchange connectivity and relationships for its clients and alongside its own design innovations like the Message Bus architecture, works in partnership with dozens of exchanges. By exploiting every opportunity and leveraging every advantage, FFastFill can maximise speed and reliability through its own systems and to the exchanges.
- ▶ The FFastFill Managed Exchange Connection Service is a high availability, high performance and highly secure, fully managed network service platform which is application neutral, and can be configured at its edge to meet different customer-defined service levels
- ▶ Support for resilient Exchange connectivity, front-end trading application servers, middle-office application servers and back-office application servers.
- ▶ Core network is based on high-speed, resilient, backplane IP router technology. This core network has been designed and implemented to meet high availability requirements. These routers have been tuned to achieve fast unicast and multicast system recovery times across the network.
- ▶ Customer-specific service levels are achieved at the network level by varying the design of the access network in terms of the number and type of connections, bandwidth and routing protocols
- ▶ Connect via leased line, managed network, cross connect or VPN
- ▶ Datacentres
 - o London (4)
 - o Chicago (2)
 - o New York
 - o Sydney
 - o Singapore (2)
 - o Hong Kong
 - o Tokyo
- ▶ Fully risk managed
 - o Real-time cross-asset credit and market risk monitoring and management
 - o Intraday position and transaction risk-based margining (SPAN, TIMS, etc)
 - o Configurable hierarchical limits for pre and post-trade risk parameters
 - o Pro-active audio, visual and message based alerting
 - o Detailed audit trail of user actions, system messages and alerts

```

4 9=371 35=AC 34=127 49=USER1 52=20080611-17:02
0=2 41=20080611-655784 44=-4.31 54=2 55=L 59=0 6
48=test 452=3 448=Liffe a11 452=22 555=3
600=L 608=FXXXXX 609=FUT 610=200809 623=1 624=1
600=L 608=FXXXXX 609=FUT 610=200812 623=2 624=2
600=L 608=FXXXXX 609=FUT 610=200903 623=1 624=1
  
```

London
t. +44 (0) 20 3002 1900
e. sales@ffastfill.com

Chicago
t. +1 (312) 6767 0620
e. sales@ffastfill.com

Singapore
t. +65 9777 0055
e. sales@ffastfill.com

Sydney
t. +61 (2) 9227 9404
e. sales@ffastfill.com

New York
t. +1 201 644 7226
e. sales@ffastfill.com