



Chi-X Europe Migration onto BATS Europe Technology Testing Facilities & Availability

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Summary

The purpose of this document is to clarify testing requirements, facilities and availability.

All testing and development questions should be directed to the BATS Europe Trade Desk at TradeDeskEurope@batstrading.com or +44.207.012.8901.

Production:

- The existing Chi-X Europe Integrated and Dark books will migrate onto BATS Europe technology and remain located at the Equinix Slough datacentre (LD4).
- New IPs and Ports will be assigned for access to the new Chi-X Europe environment in LD4.
- Participants will be allocated a specific port range for access to the new Chi-X Europe environment. This will mitigate the need for Participants to make firewall changes for future additions of ports within the existing range.
- New CompIDs and other application session-level configuration detail as regards order entry ports, market data ports and dropcopy ports will be assigned to all participants.
- Participants can request ports in the new Chi-X Europe Production environment as of **20th February 2012**.
- The new Chi-X Europe Production platform will be available for test access from **20th February 2012**, offering:
 - Network connectivity
 - FIX and Binary Order Entry (BOE) session logon and heart-beating
 - Order submission on test symbols only
 - Market data (both TCP and multicast PITCH) on test symbols only
 - Dropcopy port access
- **Failover Testing Opportunities** – Data centre failover tests from LD4 to LD3 will be performed once a week every Wednesday starting from **Wednesday 21st March** and ending on **Wednesday 25th April**. The weekly tests will commence at 13:00 UK time and complete no later than 14:00 UK time on those testing Wednesdays.
- With regard to **Reference Data**, BATS Europe will provide both BATS Europe reference data and Chi-X Europe reference data, and provide it in both file formats. The details will be made available in the [Reference Data Migration Guide](#) and the [Web Migration Guide](#).
Post migration, the existing Chi-X Europe FTP facility for reference data and participant trade data files will be deprecated.
- The new Disaster Recovery Chi-X Europe platform in Equinix Park Royal (LD3) will be available for test access from **27th February 2012**.
- Ports in LD4 will automatically be mirrored in LD3. Participants will target the same port but different IP address depending on the datacentre. Participants will not be required to request ports in LD3, with the exception of Multicast GRP ports which will be available in LD3 upon request.
- Post migration, the available market data products on the new Chi-X Europe environment will be BATS Europe TCP PITCH and BATS Europe Multicast PITCH only.
- Post migration, the available order entry protocols on the new Chi-X Europe environment will be BATS Europe FIX protocol, BATS Europe BOE protocol and Chi-X Europe FIX compatibility mode only.
- Post migration, the only dropcopy protocols available on the new Chi-X Europe environment will be BATS Europe standard FIX Drop, BATS Europe Order by Order FIX Drop, and BATS Europe DROP protocol.

Production Dress Rehearsals:

The purpose of the Dress Rehearsal is to provide participants the opportunity to test end-to-end connectivity into the new Chi-X Europe PRODUCTION platform located in LD4.

- There will be two Dress Rehearsals in advance of the Chi-X Europe migration to BATS Europe technology, the first will occur on **Saturday 24th March** and the second on **Saturday 21st April 2012**.
- Attendance is not mandatory but is highly recommended, as these activities provide participants the opportunity to test connectivity, submit orders and consume market data on the new platform.
- All live symbols will be available for order submission during the dress rehearsals.
- Both TCP and Multicast market data feeds will be active for the duration of the dress rehearsals. Participants should expect to receive market data on live ports and should make arrangements not to publish this data into systems that are not expecting to receive live data over a weekend.
- Viable amounts of load will be simulated for the purposes of market data consumption and throughput testing. Participants should clear down their applications at the end of each dress rehearsal to ensure unwanted data from these weekend tests is not retained in their trading systems on Monday morning.
- Simulated market data load will be distributed in the following symbols only:

Matching Unit	Symbols
Unit 1	BARCI
Unit 2	JDWI
Unit 3	SABI, RY4Bi
Unit 4	EDFp
Unit 5	HOp
Unit 6	SIPb, MTa, ZONu
Unit 7	BASd
Unit 8	LHAd, ZAGv
Unit 9	Fm, AMSe
Unit 10	PCm, OHLe
Unit 11	EFGNz
Unit 12	SEBAs, SYDBc, NOK1Vh, STLo

- Participants may also enter orders in symbols of their own choosing and conduct their own testing over the duration of the day.
- During each dress rehearsal, there will be a test of failover of the new Chi-X Europe PRODUCTION environment from LD4 to the disaster recovery site at LD3.
- During each dress rehearsal, Participant Trade Reconciliation files (both intra- and EOD) will be available upon request to the [Trade Desk](#) .
- PITCH data files will also be available upon request from the [Trade Desk](#) only.
- Dress Rehearsals will **not** include Clearing to CCPs

- The schedule of activities planned for the dress rehearsal dates is as follows:

Time (UK time)	Activity
04:00	Reference Data Files Available
06:30	Connectivity available to all Chi-X Europe FIX, BOE, PITCH and DROP ports
07:00	NOC & TradeDesk available for any connectivity issues
07:30	Conference Bridge opens
08:00	Start of Trading
08:00 – 08:15	Light simulated load – 4800 events/second
08:15 – 08:30	Medium simulated load – 9600 events/second
08:30 – 08:35	Heavy simulated load – 57600 events/second
08:35 – 09:00	Self-directed testing
09:00 – 09:15	Light simulated load – 4800 events/second
09:15 – 09:30	Medium simulated load – 9600 events/second
09:30 – 09:35	Heavy simulated load – 57600 events/second
09:35 – 10:00	Self-directed testing
10:00 – 10:15	Light simulated load – 4800 events/second
10:15 – 10:30	Medium simulated load – 9600 events/second
10:30 – 10:35	Heavy simulated load – 57600 events/second
10:35 – 11:00	Self-directed testing
11:00 – 11:15	Light simulated load – 4800 events/second
11:15 – 11:30	Medium simulated load – 9600 events/second
11:30 – 11:35	Heavy simulated load – 57600 events/second
11:35 – 12:00	Self-directed testing
12:00 – 12:15	Light simulated load – 4800 events/second
12:15 – 12:30	Medium simulated load – 9600 events/second
12:30 – 12:35	Heavy simulated load – 57600 events/second
12:35 – 13:00	Self-directed testing
13:00	BATS Chi-X Europe staff invoke LD4 to LD3 Datacentre Failover
13:30	LD3 will be available for trading from 13:30
13:30 – 13:45	Light simulated load – 4800 events/second
13:45 – 14:00	Medium simulated load – 9600 events/second
14:00 – 14:05	Heavy simulated load – 57600 events/second
14:05 – 14:30	Self-directed testing
14:30 – 14:45	Light simulated load – 4800 events/second
14:45 – 15:00	Medium simulated load – 9600 events/second
15:00 – 15:05	Heavy simulated load – 57600 events/second
15:05 – 15:30	Self-directed testing
15:30 – 15:45	Light simulated load – 4800 events/second
15:45 – 16:00	Medium simulated load – 9600 events/second
16:00 – 16:05	Heavy simulated load – 57600 events/second
16:05 – 16:30	Self-directed testing
16:30	End of Trading - Conference Bridge closes

Certification (UAT):

- The new Chi-X Europe UAT (Certification) environment will be available **23rd January 2012**, and Participants can request ports in the new environment from this date.
- New CompIDs and other application session-level configuration detail as regards order entry ports, market data ports and dropcopy ports will be assigned to all participants.
- The Certification environment will be available weekdays from 08:00 – 20:00 UK time weekdays offering order entry, market data and dropcopy feed data.
- Current Certification environment market data pricing can be viewed by utilising the BookViewer applet on the [BATS Europe Certification Website](#).
- With regard to **Reference Data**, BATS Europe will provide both BATS Europe reference data and Chi-X Europe reference data, and provide it in both file formats. The details will be made available in the [Web Migration Guide](#). **Post migration, the existing Chi-X Europe FTP facility for reference data and participant trade data files will be deprecated.**
- From **23rd January 2012**, end-to-end clearing testing involving CCPs will be available on the new Chi-X UAT environment under a temporary MIC code of **CHIB**.
- The old Chi-X Europe UAT environment (with the CHIX MIC code) will continue to be available, however **end-to-end clearing testing facilities on this environment will be ceased after 16th March 2012.**
- After **16th March 2012**, the new Chi-X UAT environment will adopt the real MIC code of CHIX, whilst the temporary MIC code of CHIB will be deprecated.

Market Data Testing

- There is no mandatory certification test for market data connections. Instead participants are encouraged to self-certify their market data applications.
- Historical production PITCH files (both multicast and TCP) are available via download from the secure Participant login section of the BATS Chi-X Europe website. These files can also be made available on a hard drive or memory stick upon request.
- The certification TCP & multicast PITCH streams are also accessible via VPN.
- A test program useful for testing and debugging multicast infrastructure is available at: http://www.batstrading.com/resources/membership/mcast_pitch.zip
- The new Chi-X Europe certification environment will be available **23rd January 2012**, with BATS Europe TCP PITCH and BATS Europe Multicast PITCH market data protocol options available for daily testing.

Order Entry Testing

- **Any trading participants who are not existing BATS Europe members are required to certify for order entry.**
- **Any participants requiring dropcopies, who are not existing BATS Europe members are required to certify for dropcopies.**
- For the avoidance of doubt, certification test (conformance) requirements will depend on membership status as detailed in the table below:

Membership Status	Trading Protocol choice	Mandatory Certification test?
Existing BATS Europe Member	Native BATS Europe FIX mode	No
Existing BATS Europe Member	BATS Binary Order Entry (BOE)	No
Existing BATS Europe Member	Dropcopy feed	No
Chi-X Europe Member only or new BATS Europe Member	Any	Yes
Any	Chi-X FIX compatibility mode	Yes

- Certification scripts are available upon request from the [BATS Europe Trade Desk](#).
- The new Chi-X Europe certification environment will be available **23rd January 2012**, with native BATS Europe FIX protocol, BATS Europe BOE protocol, Chi-X Europe FIX compatibility mode and dropcopy options available for daily testing.

High Level Product Migration Guide

Current Chi-X Europe platform	New Chi-X Europe platform on BATS technology
Chi-X Europe FIX Trading protocol	Native BATS Europe FIX mode OR Chi-X Europe FIX compatibility mode
Chi-X Europe BTP Trading protocol	BATS Europe Binary Order Entry (BOE)
Chi-X Europe Multicast Data Feed	BATS Europe Multicast PITCH Feed
Chi-X Europe TCP Market Data Feed (CHIXMD)	BATS Europe TCP PITCH Feed
Chi-X Europe FIX AMDF Drop Copy protocol	FIX Order By Order dropcopy (odrop)
Chi-X Europe FIX UTR Drop Copy protocol	Standard FIX Dropcopy

Documentation:

All integration documentation is published at <http://www.batstrading.co.uk/integration/>