

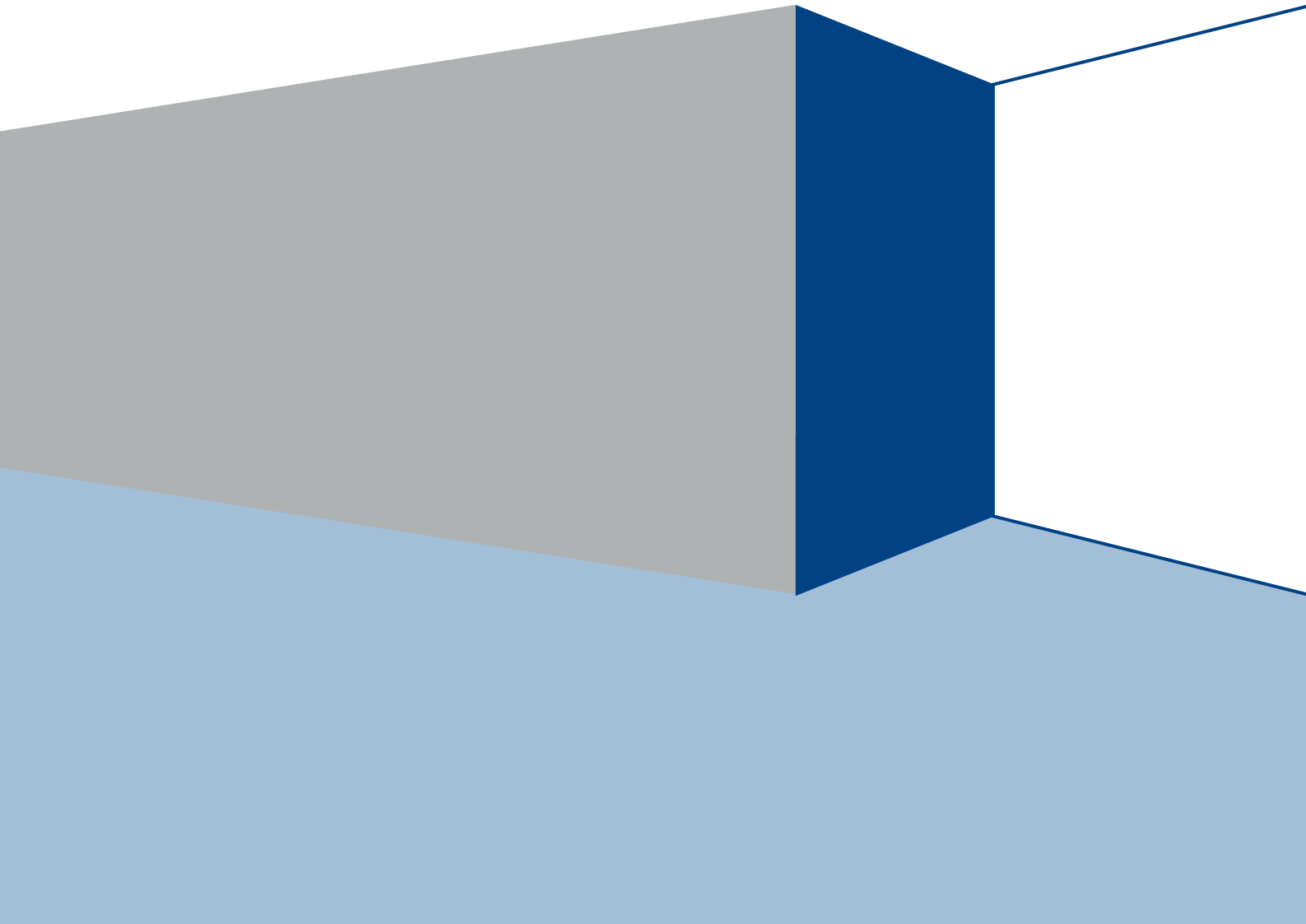


**London**  
Stock Exchange

MIT103 · MIGRATION TO MILLENNIUM EXCHANGE

# Customer Dress Rehearsal Guide Saturday 9 October

Issue 1.0 · 30 September 2010



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# 1. Introduction

## 1.1. Purpose of this document

This document forms part of a series providing a detailed view of all trading and information services available from the Exchange, following the migration to Millennium Exchange.

It is the third in the series and provides an overview of first of two Customer Dress Rehearsals scheduled for Saturday 9 October. The guide includes the trading schedule for the day, expected customer activity, connectivity information and the provision of market data.

Please see a list of the associated project documentation below:

- MIT101 - Migration to Millennium Exchange
  - MIT102 - Testing and Migration Guide
  - **MIT103 – Customer Dress Rehearsal Guide – Saturday 9 October (this document)**
  
- MIT201 - Guide to New Trading System
  - MIT202 – Trading Gateway (FIX 5.0) Specification
  - MIT203 – Native Interface Message Specification
  - MIT204 – Post Trade Gateway (FIX 5.0) Specification
  - MIT205 – Drop Copy Gateway (FIX 5.0) Specification
  
- MIT301 - Guide to Market Data Services
  - MIT302 – FIX/FAST Message Specification
  - MIT303 – Level 2-ITCH Message Specification
  - MIT304 - Regulatory News Service Specification
  
- MIT401 - Reference Data Service Specification
  
- MIT501 – Guide to the Customer Testing Services
  - MIT502 - Guide to Application Certification

This series principally covers non-regulatory information. It does not override or supersede the Rules of the London Stock Exchange, the AIM Rules or Admission and Disclosure Standards and is intended to be read in conjunction with these Rules documents and the Millennium Exchange Parameters document.

## 1.2. Document History

This document has been through the following iterations:

Issue	Date	Description
1.0	30 September 2010	First issue of this document published via the Exchange's website and distributed to customers.

## 1.3. Enquiries

Please contact either Client Technology Services (UK) Service Desk or your Technical Account Manager if you have any questions about the Millennium Exchange services outlined in this document: Client Technology Services (UK) can be contacted at:

- Telephone: +44 (0)20 7797 1500
- Email: [support@londonstockexchange.com](mailto:support@londonstockexchange.com)

## 2. Test Overview

Customers are required to connect to each production gateway for which they have been configured using their production enablements.

In addition, customers will be required to perform functional activities as they would during a normal trading day such as logon, order entry, execution and other message interaction. This will be monitored by the Exchange for market readiness purposes.

Furthermore, customers are also encouraged to enter high volumes of messages throughout the day to fully test the performance of their applications.

In order to assist customer testing of their production configuration, TradElect will also be available during the dress rehearsals. Customers will be able to perform functional activities as they would during a normal trading day, to facilitate testing of the Order Book for Retail Bonds which will remain on TradElect post go-live. **Customers are advised that all other instruments on TradElect will be in a suspended state.**

**Prior to the dress rehearsal, customers are recommended to take a backup of data. This will ensure that on completion of the dress rehearsal activities they are able to roll back to the known position in readiness for TradElect production service on the next trading day.**

## 3. Pre-Dress Rehearsal Activities

Prior to the customer dress rehearsal, customers are required to have completed all relevant activities where necessary:

- Testing of applications in CDS.
- Self-certification of any customer in-house applications.
- Receipt/installation of applications and associated documentation to be provided by ISVs.
- Production enablement setup, including receipt of Configuration Forms (with RNS channel access where requested).
- Completion of any internal technical network/application/hardware changes (Production IP addresses can be found in Appendix A).
- Connectivity to the Early Access Service (EAS) with ALL applications to ALL gateways expected to be used in production.

All the relevant documentation to enable customers to satisfy these requirements can be found at the link below:

<http://www.londonstockexchange.com/products-and-services/millennium-exchange/technicalinformation/technicalinformation.htm>

## 4. Rehearsal Activities

### 4.1. Market Data

The Market Reference Data files will be available from 06:00 BST and can be downloaded via the Secure File Transfer Protocol (SFTP) service. The SFTP address can be found in Appendix A.

Reference prices of all instruments will be set to the prices of the previous day. This is to ensure that realistic prices are entered by the members during the dress rehearsal.

#### 4.1.1. RNS Announcements

RNS announcements will be published throughout the dress rehearsal and will include various announcement types that customers would expect to see during a normal trading day. High volumes, consistent with those seen at the start of a normal RNS day (e.g. 07:00am), will also be simulated.

A detailed timetable of RNS activities will be made available shortly.

## 4.2. Session Timetables

### 4.2.1. Millennium Exchange

The dress rehearsal will follow the standard trading day as described in the table below:

Time (BST)	Description
06:00 onwards	Reference Data Available
06:00 onwards	Connectivity to all Millennium Exchange Gateways
07:00 - 07:50	Start of Trading
07:15 - 17:15	Trade Reporting
07:50 - 08:00	Open Auction Call
08:00 - 16:30	Continuous Trading
14:00 - 15:00	High Volume Period
16:30 - 16:35	Closing Auction Call
16:35 - 17:15	Post Close Session

As indicated above, the dress rehearsal includes a high volume input period. Customers are requested to enter high volumes of trading messages (representative of a normal busy day) into Millennium Exchange during this period.

### 4.2.2. TradElect/Infolect

TradElect/Infolect will be following a standard Participant Test Weekend schedule as described in the table below.

Time (BST)	Description
09:30 - 16:00	TradElect/Infolect Connectivity
10:00 - 10:45	Reference Data Download
10:45 - 16:00	Functional Testing Window

Customers are reminded that the Order Book for Retail Bonds will only be available for testing. All other instruments will be suspended. Customers are also reminded that any remaining orders will be deleted.



## 4.3. Testing Approach

### 4.3.1. Customer Testing Requirements

Customers are recommended to carry out the following activities:

#### Logon procedure

- Connect each application to each gateway for which the customer has been configured (including recovery services where appropriate) with a view to testing all UserIDs/Trader Groups planned for use in production.

#### Trading activity (where supported)

- Enter Orders (with different order types where applicable)
- Modify Orders (including: size, price, date and time validity, participant reference, client reference)
- Cancel Orders
- Enter Trade Reports
- Own Order Book Download
- Own Trades Book Download
- Confirm all other appropriate ISV/Software trading functionality
- Market makers should enter/modify/cancel quotes (executable and/or firm quotes) at the start of the day to ensure they can be managed successfully.

#### Market data activity (where supported)

- Download reference data
- Confirm receipt of real time market data (orders and prices, and RNS announcements)
- Confirm receipt of requested messages via the relevant replay/recovery services
- Confirm all appropriate ISV/Software market data functionality

In addition to the above activities, customers are advised to connect to TradElect/Infolect and perform functional activities in the Order Book for Retail Bonds to satisfy themselves that their applications can successfully manage messages received by all Exchange systems.

Furthermore, customers are reminded of their responsibility for the correct operation of their applications and should satisfy themselves that they have successfully re-connected to TradElect/Infolect before the end of the test session (as described in section 4.2.2) so that they are ready to commence trading as normal on the next trading day.

### 4.3.2. Exchange Activities

In addition to the above customer test activities, the Exchange will undertake some intraday actions in Millennium Exchange, including the suspension and/or restoration of instruments. This will allow customers to ensure they are able to process the relevant messages generated by these actions or changes to the customer reference files where appropriate. The Exchange will be carrying out the following activities throughout the day:

- Suspension of instruments
- Restoration of instruments
- Market maker registration/de-registrations
- Ex-Marker status
- Bid status

Customer actions will also be supported to replicate the service provided by the Exchange in the course of a standard trading day. This will include:

- Single order deletes
- Mass order deletes
- Contra trade requests
- Trade report submissions and deletions

Please note that the Exchange will relax its authorised persons' requirements, for the purpose of order deletes in this dress rehearsal only.

### 4.4. Testing Confirmation

At the end of the dress rehearsal, customers are required to confirm the success of their day's testing. The preferred approach is to send an email to [support@londonstockexchange.com](mailto:support@londonstockexchange.com) in order to confirm success or to highlight any potential issues during each dress rehearsal.

## 4.5. Customer Support

### 4.5.1. Support Desk

During the dress rehearsal, customers should contact the Millennium Exchange support desk on: +44 (0)20 7797 1500 or [support@londonstockexchange.com](mailto:support@londonstockexchange.com) for technical assistance from 07:30 (BST). Technical Account Managers will also be available to support customers during the dress rehearsal.

### 4.5.2. Weekend Activity Monitor

Customers will be kept informed of dress rehearsal progress throughout the day via the following website:

<http://www.londonstockexchange.com/weekendactivitymonitor/>

### 4.5.3. Supporting Documentation

Further information on all aspects of the Migration to Millennium Exchange can be found at the link below:

[www.londonstockexchange.com/millennium\\_technical\\_specifications](http://www.londonstockexchange.com/millennium_technical_specifications)

# 5. Appendix A – Production IP Addresses

## 5.1. Exchange Gateway (Trading) Services

Service	Exchange IP Address	TCP Port
Fix Trading GW 01 - Channel 1 Primary	194.169.8.1	58201
Fix Trading GW 01 - Channel 1 Backup	194.169.8.2	58201
Fix Trading GW 01 - Channel 2 Primary	194.169.8.1	58202
Fix Trading GW 01 - Channel 2 Backup	194.169.8.2	58202
Fix Trading GW 02 - Channel 1 Primary	194.169.8.3	58221
Fix Trading GW 02 - Channel 1 Backup	194.169.8.4	58221
Fix Trading GW 02 - Channel 2 Primary	194.169.8.3	58222
Fix Trading GW 02 - Channel 2 Backup	194.169.8.4	58222
Fix Trading GW 03 - Channel 1 Primary	194.169.8.5	58241
Fix Trading GW 03 - Channel 1 Backup	194.169.8.6	58241
Fix Trading GW 03 - Channel 2 Primary	194.169.8.5	58242
Fix Trading GW 03 - Channel 2 Backup	194.169.8.6	58242
Native Trading 01 Realtime Channel	194.169.8.48	58601
Native Trading 01 Recovery Channel	194.169.8.48	58801
Native Trading 02 Realtime Channel	194.169.8.49	58602
Native Trading 02 Recovery Channel	194.169.8.49	58802
Native Trading 03 Realtime Channel	194.169.8.50	58603
Native Trading 03 Recovery Channel	194.169.8.50	58803
Native Trading 04 Realtime Channel	194.169.8.51	58604
Native Trading 04 Recovery Channel	194.169.8.51	58804
Native Trading 05 Realtime Channel	194.169.8.52	58605
Native Trading 05 Recovery Channel	194.169.8.52	58805
Native Trading 06 Realtime Channel	194.169.8.53	58606
Native Trading 06 Recovery Channel	194.169.8.53	58806
Native Trading 07 Realtime Channel	194.169.8.54	58607
Native Trading 07 Recovery Channel	194.169.8.54	58807
Native Trading 08 Realtime Channel	194.169.8.55	58608
Native Trading 08 Recovery Channel	194.169.8.55	58808
Native Trading 09 Realtime Channel	194.169.8.56	58609
Native Trading 09 Recovery Channel	194.169.8.56	58809
Post Trade GW 01 - Channel 1 Primary	194.169.8.24	58401
Post Trade GW 01 - Channel 1 Backup	194.169.8.25	58401
Post Trade GW 01 - Channel 2 Primary	194.169.8.24	58402
Post Trade GW 01 - Channel 2 Backup	194.169.8.25	58402
Post Trade GW 02 - Channel 1 Primary	194.169.8.26	58421
Post Trade GW 02 - Channel 1 Backup	194.169.8.27	58421
Post Trade GW 02 - Channel 2 Primary	194.169.8.26	58422
Post Trade GW 02 - Channel 2 Backup	194.169.8.27	58422
Drop Copy GW 01 - Channel 1 Primary	194.169.8.32	58501
Drop Copy GW 01 - Channel 1 Backup	194.169.8.33	58501
Drop Copy GW 01 - Channel 2 Primary	194.169.8.32	58502
Drop Copy GW 01 - Channel 2 Backup	194.169.8.33	58502
Drop Copy GW 02 - Channel 1 Primary	194.169.8.34	58521
Drop Copy GW 02 - Channel 1 Backup	194.169.8.35	58521
Drop Copy GW 02 - Channel 2 Primary	194.169.8.34	58522
Drop Copy GW 02 - Channel 2 Backup	194.169.8.35	58522

## 5.2. Market Information Services

### 5.2.1. Primary Feed

ID (AltID)	Channel name	Config type	Multicast Feed A			Replay Service (Active)		Recovery Service (Active)	
			Multicast address (Active)	Multicast Source IP Address	Service Port (UDP)	LSEG VIP IP	TCP Port	LSEG VIP IP	TCP Port
XL	Off-book channel	FIX/FAST	224.4.2.1	194.169.8.66	60000	194.169.8.85	63001	194.169.8.85	64001
UKAL1	UK Level 1 - A	FIX/FAST	224.4.2.2				63002		64002
UKBL1	UK Level 1 - B	FIX/FAST	224.4.2.3				63003		64003
UKSL1	UK Level 1 Structured Products	FIX/FAST	224.4.2.4				63004		64004
EUL1	European Level 1	FIX/FAST	224.4.2.5				63005		64005
ITL1	International Level 1	FIX/FAST	224.4.2.6				63006		64006
UKA2P	UK Level 2 Snapshot (price) - A	FIX/FAST	224.4.2.7				63007		64007
UKB2P	UK Level 2 Snapshot (price) - B	FIX/FAST	224.4.2.8				63008		64008
UKS2P	UK Level 2 Snapshot Structured Products (price)	FIX/FAST	224.4.2.9				63009		64009
IT2P	International Level 2 Snapshot (price)	FIX/FAST	224.4.2.10				63010		64010
UKA2O	UK Level 2 Snapshot (order) - A	FIX/FAST	224.4.2.11				63011		64011
UKB2O	UK Level 2 Snapshot (order) - B	FIX/FAST	224.4.2.12				63012		64012
UKS2O	UK Level 2 Snapshot Structured Products (order)	FIX/FAST	224.4.2.13				63013		64013
EU2O	European Level 2 Snapshot (order)	FIX/FAST	224.4.2.14				63014		64014
IT2O	International Level 2 Snapshot (order)	FIX/FAST	224.4.2.15				63015		64015
IND	FTSE Indices - UK and International	FIX/FAST	224.4.2.16				63016	N/A	N/A
RNS	Regulatory News Service	FIX/FAST	224.4.2.17				63017	N/A	N/A
A	FTSE 100 full depth - A	ITCH	224.4.2.32				63032	194.169.8.85	64032
B	FTSE 100 full depth - B	ITCH	224.4.2.33				63033		64033
C	FTSE 250 full depth	ITCH	224.4.2.34				63034		64034
D	Structured Products full depth	ITCH	224.4.2.35				63035		64035
E	Miscellaneous full depth	ITCH	224.4.2.36				63036		64036
F	European full depth	ITCH	224.4.2.37				63037		64037
G	International full depth	ITCH	224.4.2.38				63038		64038

## 5.2.2. Secondary Feed

			Feed B						
			Multicast Feed B (Active)			Replay Service (Passive)		Recovery Service (Passive)	
ID (AltID)	Channel name	Config type	Multicast address (Active)	Multicast Source IP Address	Service Port (UDP)	LSEG VIP IP	TCP Port	LSEG VIP IP	TCP Port
XL	Off-book channel	FIX/FAST	224.4.3.1	194.169.8.98	60000	194.169.8.115	63001	194.169.8.115	64001
UKAL1	UK Level 1 - A	FIX/FAST	224.4.3.2				63002		64002
UKBL1	UK Level 1 - B	FIX/FAST	224.4.3.3				63003		64003
UKSL1	UK Level 1 Structured Products	FIX/FAST	224.4.3.4				63004		64004
EUL1	European Level 1	FIX/FAST	224.4.3.5				63005		64005
ITL1	International Level 1	FIX/FAST	224.4.3.6				63006		64006
UKA2P	UK Level 2 Snapshot (price) - A	FIX/FAST	224.4.3.7				63007		64007
UKB2P	UK Level 2 Snapshot (price) - B	FIX/FAST	224.4.3.8				63008		64008
UKS2P	UK Level 2 Snapshot Structured Products (price)	FIX/FAST	224.4.3.9				63009		64009
IT2P	International Level 2 Snapshot (price)	FIX/FAST	224.4.3.10				63010		64010
UKA2O	UK Level 2 Snapshot (order) - A	FIX/FAST	224.4.3.11				63011		64011
UKB2O	UK Level 2 Snapshot (order) - B	FIX/FAST	224.4.3.12				63012		64012
UKS2O	UK Level 2 Snapshot Structured Products (order)	FIX/FAST	224.4.3.13				63013		64013
EU2O	European Level 2 Snapshot (order)	FIX/FAST	224.4.3.14				63014	64014	
IT2O	International Level 2 Snapshot (order)	FIX/FAST	224.4.3.15				63015	64015	
IND	FTSE Indices - UK and International	FIX/FAST	224.4.3.16				63016	N/A	N/A
RNS	Regulatory News Service	FIX/FAST	224.4.3.17				63017	N/A	N/A
A	FTSE 100 full depth - A	ITCH	224.4.3.32				63032	194.169.8.115	64032
B	FTSE 100 full depth - B	ITCH	224.4.3.33				63033		64033
C	FTSE 250 full depth	ITCH	224.4.3.34				63034		64034
D	Structured Products full depth	ITCH	224.4.3.35				63035		64035
E	Miscellaneous full depth	ITCH	224.4.3.36	63036	64036				
F	European full depth	ITCH	224.4.3.37	63037	64037				
G	International full depth	ITCH	224.4.3.38	63038	64038				

### 5.2.3. Production SFTP IP Address

Customers should target the following IP address for access to the SFTP files associated with the Millennium Exchange production environment:

- 194.169.8.40 (TCP Port: 58101)



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London Stock Exchange  
10 Paternoster Square  
London EC4M 7LS  
Telephone: +44 (0)20 7797 1000

[www.londonstockexchange.com](http://www.londonstockexchange.com)