TQ103 – TRADING TECHNICAL PARAMETERS

Issue 1.6
26 October 2016

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Contents

1.0 Introduction

1.1 Purpose

The purpose of this document is to provide participants with a summary of technical trading parameters when designing their trading applications.

1.2 Readership

This document is a supporting document to the interface technical specifications. When read in conjunction with the other technical specifications, these documents provide all of the details Turquoise participants require for connecting to the MillenniumIT trading platform.

This document is particularly relevant to project and technical staff within member firms and companies that provide Turquoise-related services to member and non-member firms.

1.3 Document series

This document is part of a series of documents providing a holistic view of full trading and information services available from Turquoise.

For reference, the full range of documents is outlined below:

– TQ102 – Connectivity Guide
– TQ103 – Trading Technical Parameters (this document)
– TQ201 – Trading Gateway (FIX 5.0) Specification
– TQ202 – Post Trade Gateway (FIX 5.0) Specification
– TQ203 – Drop Copy Gateway (FIX 5.0) Specification
– TQ301 – Trading Gateway (Native) Specification
– TQ401 – MITCH Level-2 Market Data Specification
– TQ501 – Guide to Reference Data Services
– TQ601 – Guide to Certification

1.4 Document history

Issue	Date	Description
1.0	31 August 2012	First issue of this document published.
1.1	3 October 2012	Section 2.5 – Updated MITCH Replay and Snapshot, and Max Idle parameters.
1.2	20 February 2013	Updated contact information.
1.3	24 October 2014	Changed reference of 'ITCH' to 'MITCH'.
1.4	21 August 2015	Added MAX_THROTTLINGS_PER_PERIOD and MSG_SAMPLING_PERIOD parameters.
1.5	19 November 2015	Section 2.5 – Corrected the USER_MAX_IDLING_TIME value.
1.6	26 October 2016	Section 2.3 – Corrected PTG_MAX_TCR_REQ_COUNT, RESEND_CACHE_SIZE, AUTO_SEQNUM_INCREMENT values. Added two new parameters: MSG_SAMPLING_PERIOD and MAX_THROTTLINGS_PER_PERIOD for clarity.

In subsequent issues, where amendments have been made to the previous version, these changes will be identified using a series of side bars as illustrated opposite.

1.5   Enquiries

Contact Technical Account Management at Turquoise for any functional queries regarding the services outlined in this document. Technical Account Management can be contacted Monday to Friday between 07:30 and 18:00 (UK time):

– Telephone: +44 (0)20 7797 3939
– Email: londontam@lseg.com

2.0 Technical parameters

2.1 FIX Trading Gateway

Parameter name	Description	Value
MAX_THROTTLINGS_PER_PERIOD	Maximum number of times a comp ID can exceed its allocated message rate, within the throttle disconnect period, before disconnection.	20
MSG_SAMPLING_PERIOD	Throttle disconnect period.	30 seconds
AUTO_SEQNUM_INCREMENT	Auto Sequence Number Increment following local gateway failover.	10,000
RESEND_CACHE_SIZE	Resend Cache Size.	2000 messages
"Heartbeat Expiry Count"	Heartbeat Expiry Count.	3 heartbeats missed
"Heartbeat Interval"	Heartbeat interval.	30 seconds

2.2 Native Trading Gateway

Parameter name	Description	Value
MAX_THROTTLINGS_PER_PERIOD	Maximum number of times a Native ID can exceed its allocated message rate, within the throttle disconnect period, before disconnection.	20
MSG_SAMPLING_PERIOD	Throttle disconnect period.	30 seconds
MAX_RECOVERY_REQUEST_COUNT	Maximum number of requests that can be made for missed messages per CompID.	50 requests
"Resend Cache Size"	Maximum number of messages, per CompID, in the Native Trading Gateway resend cache.	65,000 messages
SESSION_HB_EXPIRY_COUNT	If this number of heartbeats are not received by the Native Trading Gateway, the session for the CompID will be terminated.	5 heartbeats missed
SESSION_HB_INTERVAL	Heartbeat interval.	3 seconds

2.3 Post Trade Gateway

Parameter name	Description	Value
PTG_MAX_TCR_REQ_COUNT	Maximum OTBD requests allowed per CompID.	10 requests
RESEND_CACHE_SIZE	Resend Cache Size.	10,000 messages
AUTO_SEQNUM_INCREMENT	Auto Sequence Number Increment following local gateway failover.	5000
"Heartbeat Interval"	Heartbeat interval.	30 seconds
MSG_SAMPLING_PERIOD	Sampling period to enforce throttling.	30 seconds
MAX_THROTTLINGS_PER_PERIOD	Maximum number of times a Comp ID can exceed its allocated message rate, within the MSG_SAMPLING_PERIOD, before disconnection.	5

2.4   Drop Copy Gateway

Parameter name	Description	Value
MAX_OOBD_REQUESTS_PER_USER	Maximum OOBD requests allowed per CompID.	20 requests
MAX_CACHE_SIZE	FIX message resend cache size.	10,000 messages
AUTO_SEQNUM_INCREMENT	Auto Sequence Number Increment following local gateway failover.	10,000
HEARTBEAT_INTERVAL	Heartbeat interval.	30 seconds

2.5   MITCH Replay/Recovery Gateways

Parameter name	Description	Value
USER_MAX_IDLING_TIME	Number of seconds a member can remain connected to a gateway without sending a Replay/Snapshot Request before forced disconnection.	5 seconds
REPLAY_CACHE_SIZE	Number of multicast messages that can be retrieved via a Replay Request.	65,000 messages
USER_MAX_LOGINS_FOR_ REPLAY_CHANNEL	Maximum number of Login Requests per CompID per day per channel.	3,000
USER_MAX_REQUESTS_FOR_ REPLAY_CHANN EL	Maximum number of Replay Requests per CompID per day per channel.	3,000
USER_MAX_CONCURR_ REQUESTS_FOR_REP LAY_CHANNEL	Maximum concurrent Replay Requests.	10
USER_MAX_LOGINS_FOR_ SNAPSHOT_CHANN EL	Maximum number of Login Requests per CompID per day per channel.	2,500
USER_MAX_REQUESTS_ FOR_SNAPSHOT_ CHANNEL	Maximum number of Snapshot Requests per CompID per day per channel.	2,500
USER_MAX_CONCURR_ REQUESTS_FOR_ SNAPSHOT_CHANNEL	Maximum concurrent Snapshot Requests.	10

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