



Optimise[™]

Release Guide for Software Release 6.0

Document Version: 1.1





Abstract

This document provides information about changes related to the Optimise 6.0 release.

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1. Introduction

This document provides information about changes related to the Optimise 6.0 release **scheduled for June 3, 2013**. This release implements functionality and performance enhancements. This release **is backwards compatible**, except as noted in Section 2. The **MT1** Member Simulation Environment will be available to members on **Monday, April 8, 2013** to test the new release.

This Release Guide includes:

- A release timeline.
- A list of functional changes.
- Connectivity information for the member simulation environment.
- Impact on members.
- Documentation changes.
- Where to find support for this release.

This release will follow these phases:

- Member Simulation testing begins in the MT1 environment on Monday, April 8, 2013.
- Version 6.0 will be implemented in production Monday, June 3, 2013.

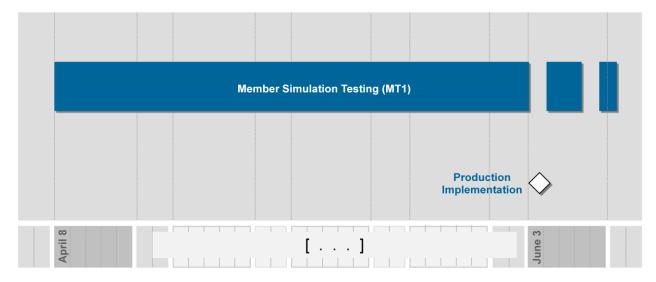


Figure 1 – Timeline for Member Simulation and Production Implementation

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2. Functional Changes

This section describes the functional changes in this release.

2.1 New Functionality

New functionality included in this release.

2.1.1 DTI/IORS — New *SideTradeID* Field

This change affects all members.

In support of an industry initiative to facilitate tracking of trades from execution to clearing, a new string field, *SideTradeID* (1506), is added to the *Trade Item Broadcast* (DTI) and *Execution Report* (IORS) messages. The data in this field are also reported to OCC in the OCC Trade Capture Report, TrdID field, and provide a direct link between the trade reported by the ISE and the cleared trade reported by OCC.

The SideTradeID is guaranteed to be unique across the exchange for the day and is a compound string comprised of the letter "B" (Bought) or "S" (Sold), followed by the internal underlying product ID converted to hex, followed by the internal trade ID. For example, a Buy in AMZN (internal product ID 2244) with internal trade ID 1234 would be formatted as "B000008C40000001234"

Table 1: DTI/IORS SideTradeID Field

Tag	Field Name	Туре	Req	Value(s)	Comments
1506	SideTradeID	String	N	Ex: "B000008C4000001234"	Carried to OCC TrdID field

2.1.2 DTI/IORS — New Liquidity (Maker/Taker) Indicators

This change affects all members.

A liquidity code (or, Maker/Taker code) is provided on a member's trade broadcast, and can be used to help calculate the fees associated with the trade.

Beginning in R6.0, the current list of codes will be expanded in order to provide more detailed information about a member's position in the trade. In the future, additional codes may be dynamically added to the list (new codes will be announced before they are implemented).

2.1.2.1 DTI Liquidity Codes

Liquidity codes are provided in the *SideLiquidityInd* field on the *Trade Item Broadcast*. The following table details the expanded list of codes:

Table 2: DTI SideLiquidityInd Field Codes

Tag	Field Name	Туре	Req	Value(s)
1444	SideLiquidityInd	Int	N	CURRENT CODES:
				1=Maker
				2=Taker
				4=Response

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Tag	Field Name	Туре	Req	Value(s)
				5=Hidden
				6=Opening
				7=Cross
				ADDITIONAL CODES (R6.0):
				8=Flashed Order
				9=Flashed Response
				10=Routed Out
				11=Trade Report
				12=Combo Maker Against Combo
				13=Combo Taker Against Combo
				14=Combo Response Against Combo
				15=Combo Hidden Against Combo
				16=Combo Opening Rotation
				17=Combo Cross
				18=Combo Taker Against Regular
				19=Regular Maker Against Combo
				20=Combo Taker Against IO
				21=Regular (incl. PIM) Taker Against IO
				22=IO Maker Against Combo
				23=IO Maker Against Regular
				24=Regular Maker Against IO Participant
				25= IO Participant Taker Against Regular

NOTE: Given the ability to dynamically add new liquidity codes, these codes can no longer be enumerated in the DTI isefix.xml template file. Beginning with R6.0, all liquidity codes are defined only in the *DTI Programming Manual*.

2.1.2.2 IORS Liquidity Codes

Liquidity codes are provided in the ISE-custom *LiquidityIndicator* (9730) field on the **Execution Report**. The following table details the expanded list of codes:

Table 3: IORS LiquidityIndicator Field Codes

Tag	Field Name	Туре	Req	Value(s)
9730	LiquidityIndicator	String	N	CURRENT CODES:
				"X"=Undefined
				"M"=Maker
				"T"=Taker
				"R"=Response
				"H"=Hidden
				"O"=Opening
				"C"=Cross
				ADDITIONAL CODES (R6.0):
				"8"=Flashed Order
				"9"=Flashed Response
				"10"=Routed Out
				"11"=Trade Report

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Tag	Field Name	Туре	Req	Value(s)
				"12"=Combo Maker Against Combo
				"13"=Combo Taker Against Combo
				"14"=Combo Response Against Combo
				"15"=Combo Hidden Against Combo
				"16"=Combo Opening Rotation
				"17"=Combo Cross
				"18"=Combo Taker Against Regular
				"19"=Regular Maker Against Combo
				"20"=Combo Taker Against IO
				"21"=Regular (incl. PIM) Taker Against IO
				"22"=IO Maker Against Combo
				"23"=IO Maker Against Regular
				"24"=Regular Maker Against IO Participant
				"25"= IO Participant Taker Against Regular

2.2 Modified Functionality

Modified functionality included in this release.

2.2.1 DTI — Market Maker Curtailment Parameters

This change affects Market Makers, only.

Currently, the setting of curtailment (speed bump) parameters is optional. Existing parameters can also be disabled by explicitly setting counter parameters or *ExposureDuration* equal to zero (0).

In R6.0 *all* curtailment parameters must be set to non-zero values in order to quote. In addition, existing parameters cannot be disabled by setting the parameters equal to zero.

If curtailment parameters are not set for a product and instrument type (regular or complex), quote transactions for that product and instrument type will be rejected. An attempt to set parameters equal to zero will also be rejected, leaving the existing parameters in place.

For example, a Market Maker (MM) is interested in using only the *CumQty* counter for curtailment. The MM sets the *CumQty* and *ExposureDuration* fields to meaningful values and sets the other counters to a very large value (2,147,483,647 [MAX_INT32]). This will have the intended effect of curtailment occurring based only on the interested counter —the other counters will never trigger curtailment within the specified timeframe because of the large value.

This change affects curtailment parameters, only. All other MM parameters — tick-worse, short-sale indicator, and auto-rotate (Primary MMs only) — are unaffected and remain optional.

MM parameters are set using the *MM Parameter Definition Request*. The table below details the changes to the curtailment parameters, only. For a complete description of the transaction, please refer to the *DTI Programming Manual*, vers. 6.0.0 (or higher).

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Table 4: MM Curtailment Parameter Fields

Tag	Field	Value(s)	Comment
14	CumQty	1 ≤ n ≤ 2,147,483,647	
8615	PctCount	99 ≤ n ≤ 2,147,483,647	Integer. E.g. 100% = 100
7966	Delta	$1 \le n \le 2,147,483,647$	
7968	Vega	$1 \le n \le 2,147,483,647$	
1629	ExposureDuration	1000 ≤ <i>n</i> ≤ 30000	milliseconds

2.2.2 IORS — LastMkt Field on Drop Copy Execution Reports

This change affects IORS Members, only.

ISE will reinstate the *LastMkt* (30) field on all drop copy (Trade-drop, Order-drop, and AMR-drop) sessions.

LastMkt (30) is used to identify the venue where the stock leg of a stock-combo order was executed.

Table 5: IORS LastMkt Field

Tag	Field	Req'd	Comment
30	LastMkt	N	Market that executed the order. Stock trades only.
			1=BYN ConvergEx U.S. Transaction Services
			3=BNY ConvergEx Millennium ATS
			4=Knight Match
			5=Knight Link
			6=Instinet CBX (US)
			7=Deutsche Bank ATS

2.3 Discontinued Functionality

There is no discontinued functionality included in this release.

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3. Technical Changes

Technical changes are described below.

3.1 Interfaces

3.1.1 DTI

The isefix.xml file has these changes:

- New model version: 6.0.1 (subject to change).
- New optional field added to Deal Item Broadcast and Trade Item Broadcast:
 - SideTradeID (String)

3.1.2 MDI

There are **no** changes to the **FastMDMTemplates.xml** file.

New version: 6.0.0

3.2 Market Data Feeds

3.2.1 Binary Reference Data Feed

There are no changes to the MDI for this release; however, the binary market data channels in MT1, only, have been reallocated. Please see Table 7: MT1 MDI Multicast IP Addresses & Ports, below for complete information.

Production IP addresses and ports are already defined. Please see the *MDI Programming Manual, vers. 6.0.0,* or higher for details.

3.3 Data Centers/Connectivity

No changes.

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4. Member Test Environment Connectivity

There are no connectivity-related changes required for this release. The connectivity tables below are provided as a courtesy.

The *Member Simulation Guide* includes these connectivity tables as well as detailed information about the environment and connecting to it with different interfaces. The guide is available on the Members Area site at https://members.ise.com.

4.1 DTI Access

Table 6: DTI IP Addresses & Ports

Connection to DTI IP Address / Netmask					
System MT1 (New R6.0)	System MT2 (Current R5.1)	Ports			
207.231.198.1 / 255.255.255.0	207.231.198.2 / 255.255.255.0	20040, 20041			

4.2 Member Test – MT1 (New R6.0)

Table 7: MT1 MDI Multicast IP Addresses & Ports

			GRE VPN or Direct	
Feed	Name	Ports	A Feed	B feed
			Source: 207.231.1	.98.65 or 66 or 67
		FAS	ST Feeds	
Deference Data Food	Snapshot	53150	224.0.75.1	224.0.75.7
Reference Data Feed	Incremental	53151	224.0.73.1	224.0.75.7
		53150		
Depth of Market Feed		53250	224.0.75.2	224.0.75.8
		53350		
		53150	224.0.75.3	
Top Quote Feed		53250		
		53350		224.0.75.9
		53151		
Trade Feed		53251		
		53351		
		53150		
Pre-Open Feed		53250	224.0.75.4	224.0.75.10
		53350		
		53150		
Order Feed		53250	224.0.75.5	224.0.75.11
		53350		

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				International Securities Exchange.	
			GRE VPN	or Direct	
Feed	Name	Ports	A Feed	B feed	
			Source: 207.231.	198.65 or 66 or 67	
		53150			
	Depth	53250			
		53350			
		53151			
	Top Quote	53251			
		53351			
		53152			
Spread Feed	Order	53252	224.0.75.6	224.0.75.12	
		53352			
		53153			
	Trade	53253			
		53353			
		53154			
	Pre open	53254			
		53354			
			ary Feeds	T	
Reference Data Feed	Snapshot	53150	224.0.75.13	224.0.75.19	
	Incremental	53151			
		53150	224.0.75.14	224 0 75 20	
Depth of Market (NOT	ACTIVE)	53250		224.0.75.20	
		53350			
To a County Found		53150			
Top Quote Feed		53250 53350	224.0.75.15	224.0.75.21	
		53151			
Trade Feed		53251			
Traue reeu		53351			
		53150			
Pre-Open Feed		53250	224.0.75.16	224.0.75.22	
. Te Open recu		53350	22 110.73.10		
		53150			
Order Feed (NOT ACTI	VE)	53250	224.0.75.17	224.0.75.23	
	,	53350			
		53150			
	Depth (NOT ACTIVE)	53250			
	, , ,	53350			
		53151			
	Top Quote	53251	- 224.0.75.18		
		53351		224 0 75 24	
Spread Feed		53152		224.0.75.24	
	Order (NOT ACTIVE)	53252			
	,	53352			
		53153			
	Trade	53253			
		53353			

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		GRE VPN or Direct	
Feed Name	Ports	A Feed	B feed
		Source: 207.231.198.65 or 66 or 67	
	53154		
Pre-Open	53254		
	53354		

NOTE: Shaded channels are not currently active.

4.3 Member Test – MT2 (Current R5.1)

Table 8: MT2 MDI Multicast IP Addresses & Ports

Feed Name			GRE VPN or Direct			
		Ports	Primary (A Feed)	Secondary (B feed)		
			Source: 207.231.198.75 or 76 or 77			
FAST Feeds						
Reference Data Feed	Snapshot	53150	224.0.75.65	224.0.75.71		
Reference Data Feed	Incremental	53151	224.0.73.03	224.0./3./1		
		53150				
Depth of Market Feed		53250	224.0.75.66	224.0.75.72		
		53350				
		53150				
Top Quote Feed		53250				
		53350	224.0.75.67	224.0.75.73		
		53151	224.0.73.07	224.0.73.73		
Trade Feed		53251				
		53351				
		53150				
Pre-Open Feed		53250	224.0.75.68	224.0.75.74		
		53350				
		53150				
Order Feed		53250	224.0.75.69	224.0.75.75		
		53350				
		53150				
	Depth	53250				
		53350				
		53151	224.0.75.70	224.0.75.76		
Spread Feed	- 1 - 3 - 1 - 1	53251				
		53351				
		53152				
	Order	53252				
		53352				

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Feed Name			GRE VPN or Direct		
		Ports	Primary (A Feed)	Secondary (B feed)	
			Source: 207.231.198.75 or 76 or 77		
		53153			
	Trade	53253			
		53353			
	Due Ones	53154			
	Pre-Open	53254 53354			
			ary Feeds		
	Snapshot	53150		224 0 75 02	
Reference Data Feed	Incremental	53151	224.0.75.77	224.0.75.83	
	•	53150			
Depth of Market (NOT	ACTIVE)	53250	224.0.75.78	224.0.75.84	
		53350			
		53150			
Top Quote Feed		53250			
		53350	224.0.75.79	224.0.75.85	
		53151	224.0.73.79		
Trade Feed		53251			
		53351			
		53150		224.0.75.86	
Pre-Open Feed		53250	224.0.75.80		
		53350			
		53150		2240 75 07	
Order Feed (NOT ACTIV	VE)	53250	224.0.75.81	224.0.75.87	
		53350			
	Donath (NOT ACTIVE)	53150			
	Depth (NOT ACTIVE)	53250 53350			
	Top Quote	53350			
		53251			
	Top Quote	53351			
Spread Feed		53152	224.0.75.82		
	Order (NOT ACTIVE)	53252		224.0.75.88	
		53352			
	Trade	53153			
		53253			
		53353			
		53154			
	Pre-Open	53254			
		53354			

NOTE: Shaded channels are not currently active.

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4.4 FIX/IORS Access

Table 9: FIX/IORS Member Simulation IP Address Connection

IP Address / Netmask	
207.231.198.19 / 255.255.255.0	

4.5 PrecISE Access

Table 10: PrecISE Member Simulation IP Address Connections

Member Test Environment	Direct Connection	irect Connection Internet Connection	
MT1 (New R6.0)	MT1 (New R6.0) 207.231.198.17		443 (HTTPS)
MT2 (Current R5.1)	207.231.198.18	74.120.84.91	443 (HTTPS)

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5. Member Test Environment Setup

There are no setup-related changes required for this release.

The *Member Simulation Guide* includes detailed information about the environment and connecting to it with different interfaces. The guide is available on the Members Area site at https://members.ise.com.

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6. Member Conformance Testing Requirements

6.1 Conformance Testing

6.1.1 DTI

Market Makers must certify changed MM Parameters requirements.

Changes related to the *SideLiquidityInd* field and new *SideTradeID* field are backwards compatible; however, conformance testing is **recommended** to ensure that member applications can handle the new values and field.

6.1.2 MDI

There are no requirements for this release.

6.2 Weekend Product Test

There are no requirements for this release.

6.3 FIX/IORS Certification

Conformance testing is **recommended** to ensure that member applications can handle the new *LiquidityIndicator* (9730) values and the new *SideTradeID* (1506) field on the **Execution Report**.

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7. Impact for Members

This Optimise release has the following impact on members:

Table 11: Member Impact by Interface

	Interface			
Impact	DTI	MDI	FIX/IORS	PrecISE
Members may need to modify their applications extensively				
Members may need to conduct a full conformance test with ISE				
Members may need to perform minor modifications to their applications (significant modifications are unlikely)	Х		Х	
Members need to conduct an interoperability test with ISE				
Members need not modify applications; modifications are covered by ISE				
Members need to engage in the new functions provided if they want to use those functions.				

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8. Support

ISE provides email and phone support through ISE's Technology Member Services (TMS) team. Members also can submit support requests on ISE's members area website at https://members.ise.com.

8.1 Release Documentation

This release has resulted in updates to these documents.

Table 12: Release Documentation

Document	Description	Release Date	
DTI Programming Manual	New version 6.0.3	May 14, 2013	
FIX Order Routing Guide	New version 6.0.4	May 14, 2013	
MDI Programming Manual	New version 6.0.1	May 2, 2013	
Member Connectivity Guide	New version 2.2.4	April 9, 2013	
Member Simulation Guide	New version 2.3.2	May 2, 2013	
Conformance Test Scripts	Not applicable		

8.2 Support Hours

Technical phone and email support is provided Monday to Friday 9:00 a.m. to 6:00 p.m. ET.

8.3 Contacts

For any questions or requests related to member simulation or technical support requests, please contact the ISE TMS team at (212) 897-0244 or email tms@ise.com.

8.4 Web Tickets

ISE's secure members site allows registered users to submit web tickets directly to the TMS team. To submit a ticket, please login at https://members.ise.com.

8.5 Training/Technical Member Forum

There is no forum scheduled for this release.

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9. Revision History

These changes have been made to this document:

Version	Date	Change	Section	Comments
1.0	April 9, 2013	Original Version		
1.1	May 24, 2013	Corrected format of SideTradeID	2.1.1	
		Updated document versions	8.1	

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