ENCORE – Inbound FIXML Developer Reference Guide
Proprietary Transmissions

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Contents

Document Organization

This document is intended to provide a detailed description of the message layouts for the Inbound FIXML system. It is intended for use as a transmission mapping reference for FIXML developers. This guide includes the FIXML elements, transmission layouts, message structures, and sample messages for each transmission type.

Glossary of Terms

Batch – In a computer, a batch job is a program that is assigned to the computer to run without further user interaction. In larger commercial computers or servers, batch jobs are usually initiated by a system user. Some are defined to run automatically at a certain time.

ENCORE – The clearing system within OCC.

FIXML (Financial Information eXchange Markup Language) – The XML derived grammar of the FIX protocol. A FIXML implementation will have message format validation, cleaner, more expressive structure, and leverage off existing standards. The initial goal is to provide the ability to embed FIXML messages within traditional FIX headers and trailers to minimize the impact on existing implementations.

Real Time – A level of computer responsiveness that a user senses as sufficiently immediate or that enables the computer to keep up with some external process (for example, to present trade data as trades are executed and cleared).

STP (Straight-Through-Processing) – The seamless integration of systems and processes to automate the trade process from end-to-end--trade execution, confirmation and settlement--without the need for manual intervention or the re-keying of data.

XML (eXtensible Markup Language) – A simple and flexible text format derived from SGML (ISO 8879). Originally designed to meet the challenges of large-scale electronic publishing, XML is also playing an increasingly important role in the exchange of a wide variety of data on the Web and elsewhere. Special purpose XML languages and standards are commonly developed with several hundred already adopted since XML 1.0 was released in February 1998.

Transmissions

This section provides the FIXML file elements, transmission layouts, message structures, and samples. The modifications are to support submission of Post Trade transactions in FIXML format.
The Proprietary ENCORE transmissions below are defined on the following pages:

- Spread Instructions
- Exercise Notices
- Do Not Exercise Declarations (DNEDs)
- Expiring Exercise Declarations (EEDs)
- Gross Position Adjustments (GPAs)
- Customer Gross Margins
- Position Change Submissions (PCSs)
- Transfers of Account
- CMTA Transfers
- Position Adjustments
- Update Trade Requests
- Allocations
- Long Holdings

Schemas associated with these inbound messages are posted on the OCC web site under Clearance and Settlement > FIXML Schema Definition Changes (https://www.theocc.com/Clearance-and-Settlement/FIXML-Schema-Definition-Changes).

Layout Formatting

Layouts in this document use arrows to indicate component block levels.

Message Layout Legend – Component Block Level Examples	
➔ **Pty**	One arrow precedes a component block that is one level down.
➔ ➔ **Sub**	Two arrows precede a component block that is two levels down.

Implementation Considerations

General

- All Strike Prices must be in decimal format for Inbound FIXML messages.
- The formatting of the sample messages contained in this document is for display purposes only. Actual FIXML messages are contained on a single line and should not be broken into multiple lines or blocks. Messages formatted on more than one line will not be accepted.

Things to Remember

- Data tags are case sensitive and capital letters must be used where required. For example, Position Maintenance Request should be entered as PosMntReq, not as posmntreq.
- Leading zeros are not required and numeric fields will be read the same way, regardless of whether or not the zeros are entered. For example, StrkPx="00030" and StrkPx="30" will be read as the same value.
- Business Date ("BizDt" - Tag 715) is a required field.

CFI Code

The Classification of Financial Instruments code (CFI Code) appears in every transmission that contains the Instrument Block (product/series/contract information). The standard for this code defines a six (6) character code in which each character's position value carries a special significance (attribute) and set of values.
In an Inbound FIXML message, the first character is used to indicate the type of financial instrument, such as "O" for Option or "F" for Future. The second character is the Call/Put indicator and is entered as "C" for Call, "P" for Put. The remaining characters are not required to be entered and users should always enter "X" to represent an unspecified or unknown attribute.
For example, CFI="**OCXXXX**" would indicate that this is an Option Call, while CFI="**FXXXXX**" would refer to Futures.

Truncation

The Max Length column in the FIXML layout provides the number of bytes that OCC processes (starting from the first byte). OCC has identified certain fields where truncation will cause post trades to reject, since the fields (such as price, quantity, product, account, etc.) could prevent or materially change how OCC clears a post trade. Fields that can cause post trades to reject are not truncated. Fields that can be truncated without causing post trades to reject (such as remarks or customer ID numbers), are truncated for any additional bytes beyond the Max Length.

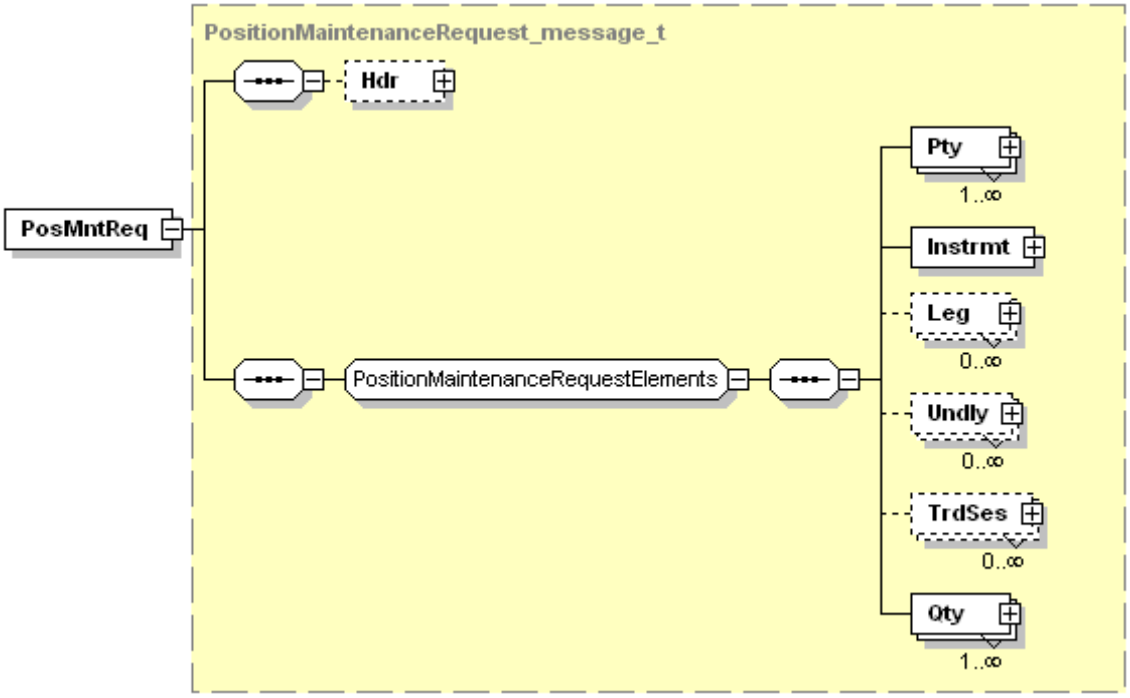
ENCORE Transmission: Spreads Instructions

FIX Message: CM to OCC	Position Maintenance Request

Overview

Spread Instructions allow Clearing Members to submit instructions to deposit long option positions in order to create unsegregated long positions for the purpose of reducing their customer account margin requirements.

Message Structure



Message Layout – Position Maintenance Request – Spread Instructions

FIXML Message							Definitions		
Tag #	Report	Comp	Sub Comp	Sub Sub Comp	Field Name	Data	Data Type	Sample Data	Max Length
	PosMntReq								
709					TxnTyp	4 = Position Change Submission/Margin Disposition	Int	4	1
715					BizDt	Business Date	LocalMktDate	2005-11-28	10
712					Actn	1 = New 3 = Cancel	Int	3	1
58					Txt	Optional Data	String	Spread Instruction	25
	➔	Pty							
448					ID	Clearing Member Number	String	00123	5
452					R	Party Role 4 = Clearing Firm	Int	4	3
	➔	➔	Sub						
523					ID	Account Type (C/F/M)	String	M	1
803					Typ	26 = Position Account Type	Int	26	3
	➔	➔	/Sub						
	➔	/Pty							
	➔	Pty							
448					ID	Sub Account ID	String	KTZ	4
452					R	Party Role 38 = Position Account	Int	38	3
	➔	/Pty							
	➔	Instrmt							
55					Sym	Symbol	String	IBM	6
461					CFI	CHAR 1: O for Option CHAR 2: C for Call, P for Put	String	OCXXXX	6
200					MMY	Series/Contract Year, Month, Date	MonthYear	20051214	8 (4 for year, 2 for month, 2 for day)
202					StrkPx	Strike Price (Decimal Format only)	Price	30.50	14 (5 for the strike whole, 9 for the strike decimal)

FIXML Message							Definitions		
Tag #	Report	Comp	Sub Comp	Sub Sub Comp	Field Name	Data	Data Type	Sample Data	Max Length
	➔	/Instrmt							
	➔	Qty							
703					Typ	IAS = Intra Spread Qty	String	IAS	6
704					Long	Spread Quantity	Int	10	7
	➔	/Qty							
	PosMntReq								

Sample Message – Spread Instructions

```
<FIXML r="20030618" s="20040109" v="4.4" xr="FIA" xv="1.1"
xmlns="http://www.fixprotocol.org/FIXML-4-4">
        <Batch BizDt="2005-11-28" TotMsg="1" >
                <PosMntReq TxnTyp="4" Actn="1" BizDt="2005-11-28" Txt="Spreads">
                        <Pty ID="00123" R="4">
                                <Sub ID="C" Typ="26"/>
                        </Pty>
                        <Instrmt Sym="VRN" CFI="OCXXXX" MMY="20070121" StrkPx="42.50"/>
                        <Qty Typ="IAS" Long="6"/>
                </PosMntReq>
        </Batch>
</FIXML>
```

NOTE: The formatting of the sample messages contained in this document is for display purposes only. Actual FIXML messages are contained on a single line and should not be broken into multiple lines or blocks. Messages formatted on more than one line will not be accepted.

Implementation Considerations

Transaction ID

In the first line of the message, users must identify the message type in the <PosMntReq> tag by entering "4" as the Transaction Type (TxnTyp). Entering this value indicates that this message refers to a Spread or PCS transaction. The Type Tag in the Quantity group (Typ=IAS) further indentifies the message as a spread transaction.

Action (Actn)

The Inbound FIXML Messages use "1" for New (Deposits) and "3" for Cancel (Withdrawals).

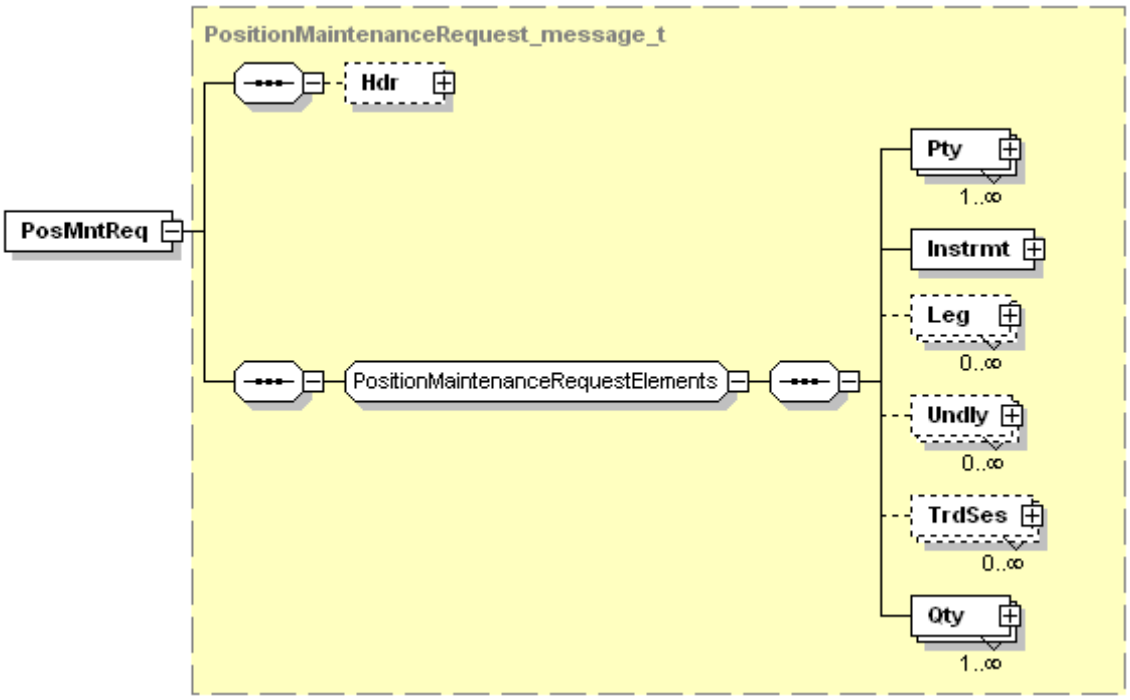
ENCORE Transmission: Exercise Notices

FIX Message: CM to OCC	Position Maintenance Request

Overview

Exercise Notices are instructions submitted by the Clearing Members to OCC in order to exercise non-expiring positions.

Message Structure



Message Layout – Position Maintenance Request – Exercise Notices

FIXML Message							Definitions		
Tag #	Report	Comp	Sub Comp	Sub Sub Comp	Field Name	Data	Data Type	Sample Data	Max Length
	PosMntReq								
709					TxnTyp	1 = Exercise	Int	1	1
715					BizDt	Business Date	LocalMkt Date	2005-11-28	10
712					Actn	1 = New	Int	1	1
58					Txt	Optional Data	String	Exercise Notice	25
	→	Pty							
448					ID	Clearing Member Number	String	00123	5
452					R	Party Role 4 = Clearing Firm	Int	4	3
	→	→	Sub						
523					ID	Account Type (C/F/M)	String	M	1
803					Typ	26 = Position Account Type	Int	26	3
	→	→	/Sub						
	→	/Pty							
	→	Pty							
448					ID	Sub Account ID	String	KTZ	4
452					R	Party Role 38 = PositionAccount	Int	38	3
	→	/Pty							
	→	Instrmt							
55					Sym	Option Symbol	String	IBM	6
461					CFI	CHAR 1: O for Option CHAR 2: C for Call, P for Put	String	OCXXXX	6
200					MMY	Series/Contract Year, Month, Date	MonthYear	20051214	8 (4 for year, 2 for month, 2 for day)
202					StrkPx	Strike Price (Decimal Format only)	Price	30.50	14 (5 for the strike whole, 9 for the strike decimal)
	→	/Instrmt							
	→	Qty							
703					Typ	EX = Option Exercise Qty	String	EX	6

FIXML Message							Definitions		
Tag #	Report	Comp	Sub Comp	Sub Sub Comp	Field Name	Data	Data Type	Sample Data	Max Length
704					Long	Exercise Quantity	Int	10	7
	➔	/Qty							
	/PosMntReq								

Sample Message – Exercise Notices

```
<FIXML r="20030618" s="20040109" v="4.4" xr="FIA" xv="1.1"
xmlns="http://www.fixprotocol.org/FIXML-4-4">
        <Batch BizDt="2005-11-28" TotMsg="1">
                <PosMntReq TxnTyp="1" Actn="1" BizDt="2005-11-28" Txt="Exercise Notice">
                        <Pty ID="00123" R="4">
                                <Sub ID="M" Typ="26"/>
                        </Pty>
                        <Pty ID="KTZ" R="38"/>
                        <Instrmt Sym="AVP" CFI="OPXXXX" MMY="20051021" StrkPx="30.00"/>
                        <Qty Typ="EX" Long="500"/>
                </PosMntReq>
        </Batch>
</FIXML>
```

NOTE: The formatting of the sample messages contained in this document is for display purposes only. Actual FIXML messages are contained on a single line and should not be broken into multiple lines or blocks. Messages formatted on more than one line will not be accepted.

Implementation Considerations

Exercise Notice Quantity

The Exercise Quantity information (Qty group) consists of two separate values: Typ (Position Type) and Long tags. The Typ indicates the type of transaction, in this case, an Exercise Notice is entered as "EX". The Long value indicates the quantity of the long position being exercised. Together these values are displayed as follows:
Qty Typ="**EX**" Long="**20**"

Transaction ID

In the first line of the message, users must identify the message type in the <PosMntReq> tag by entering "1" as the Transaction Type (TxnTyp). Entering this value indicates that this message refers to an Exercise.

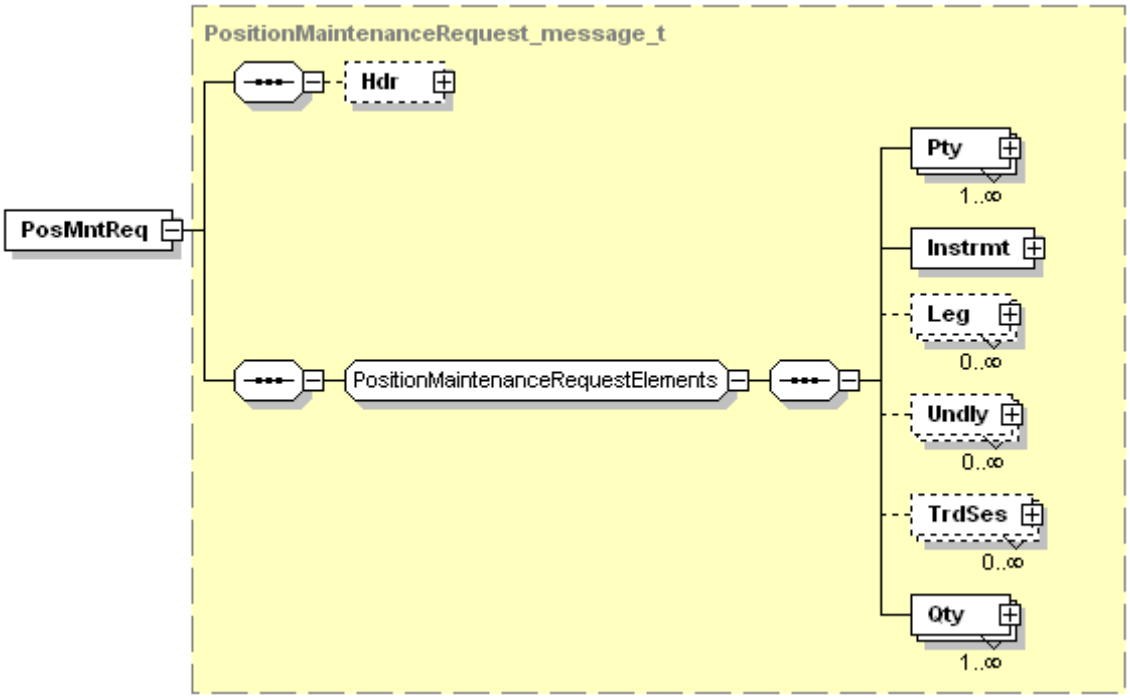
Encore Transmission: Do Not Exercise Declarations (DNEDs)

FIX Message: CM to OCC	Position Maintenance Request

Overview

Do Not Exercise Declarations (DNEDs) are instructions submitted by the Clearing Member to OCC in order to declare the intention not to exercise an expiring position that is in-the-money above OCC's Ex-by-Ex threshold. The Trade Sources (exchanges) require members to file the contrary notification by 6:00 p.m. (CT) on the last trading day prior to the expiration of an equity option contract.
The quantity on a DNED instruction indicates the amount of the final expiring position that should NOT be exercised, while the quantity on an EED instruction indicates the amount that should be exercised. A quantity of 0 is not allowed and a quantity of ALL will result in the entire position remaining unexercised. DNED instructions on positions that expire out of the money will not be considered valid.

Message Structure



Message Layout – Position Maintenance Request – Do Not Exercise Declaration

FIXML Message							Definitions		
Tag #	Report	Comp	Sub Comp	Sub Sub Comp	Field Name	Data	Data Type	Sample Data	Max Length
	PosMntReq								
709					TxnTyp	2 = Do Not Exercise	Int	2	1
715					BizDt	Business Date	LocalMktDate	2005-11-28	10
712					Actn	1 =New	Int	1	1
58					Txt	ALL	String	ALL	3
	→	Pty							
448					ID	Clearing Member Number	String	00123	5
452					R	Party Role 4 = Clearing Firm	Int	4	3
	→	→	Sub						
523					ID	Account Type (C/F/M)	String	M	1
803					Typ	26 = Position Account Type	Int	26	3
	→	→	/Sub						
	→	/Pty							
	→	Pty							
448					ID	Sub Account ID	String	ABCD	4
452					R	Party Role 38 = PositionAccount	Int	38	3
	→	/Pty							
	→	Instrmt							
55					Sym	Option Symbol	String	IBM	6
461					CFI	CHAR 1: O for Option CHAR 2: C for Call, P for Put	String	OCXXXX	6
200					MMY	Series/Contract Year, Month, Date	MonthYear	20051214	8 (4 for year, 2 for month, 2 for day)
202					StrkPx	Strike Price (Decimal Format only)	Price	30.50	14 (5 for the strike whole, 9 for the strike decimal)
	→	/Instrmt							
	→	Qty							
703					Typ	TOT = Total Transaction Qty	String	TOT	6

FIXML Message							Definitions		
Tag #	Report	Comp	Sub Comp	Sub Sub Comp	Field Name	Data	Data Type	Sample Data	Max Length
704					Long	Do Not Exercise Quantity	Int	10	7
	➔	/Qty							
	/PosMntReq								

Sample Message – Do Not Exercise Declaration

```
<FIXML r="20030618" s="20040109" v="4.4" xr="FIA" xv="1.1"
xmlns="http://www.fixprotocol.org/FIXML-4-4">
        <Batch BizDt="2008-06-20" TotMsg="1">
                <PosMntReq TxnTyp="2" Actn="1" BizDt="2008-06-20" >
                        <Pty ID="00123" R="4">
                                <Sub ID="M" Typ="26"/>
                        </Pty>
                        <Pty ID=" ABCD" R="38"/>
                        <Instrmt Sym="IBM" CFI=" OCXXXX" MMY="20080620” StrkPx="30.50"/>
                                                <Qty Typ="TOT" Long="145"/>
                </PosMntReq>
        </Batch>
</FIXML>
```

NOTE: The formatting of the sample messages contained in this document is for display purposes only. Actual FIXML messages are contained on a single line and should not be broken into multiple lines or blocks. Messages formatted on more than one line will not be accepted.

Implementation Considerations

"ALL" Indicator
The All Indicator field (Tag 58) indicates that the instruction is a DNED All instruction and will be processed using the entire final long position quantity. If the All Indicator is set to "ALL", the transaction quantity (Tag 704) is overridden. If the All Indicator (Txt Tag) is not supplied, then the transaction quantity is the quantity that will be processed. If the expected exercise quantity is zero, then the do not exercise quantity should be the entire long quantity or ALL.

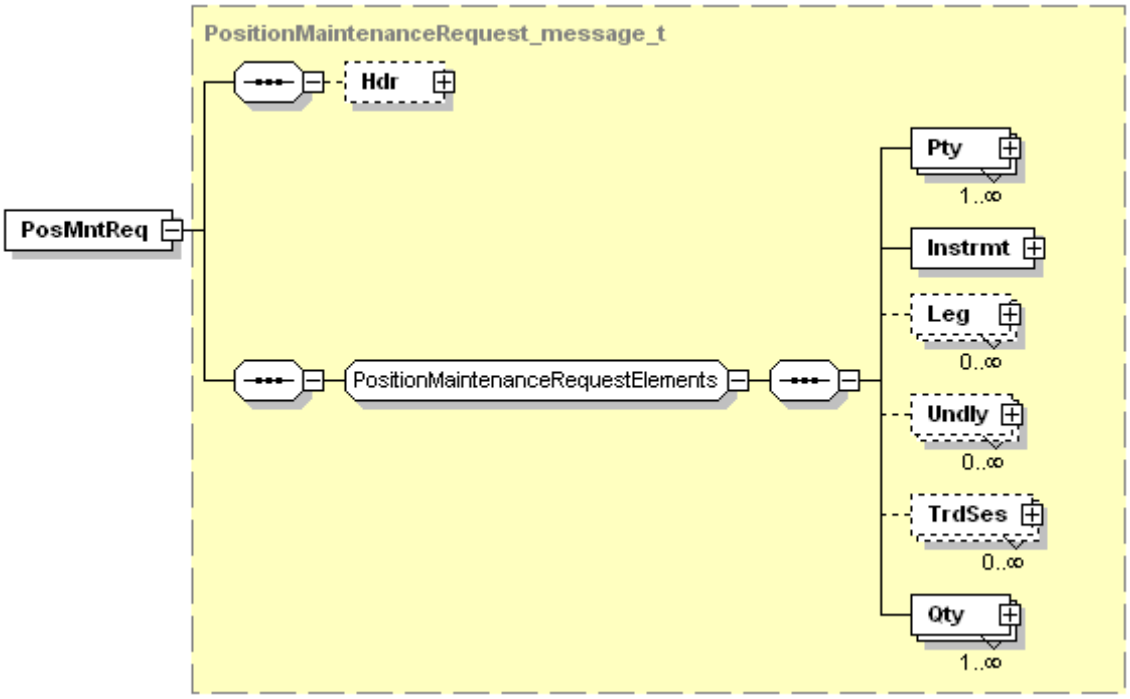
ENCORE Transmission: Expiring Exercise Declarations (EEDs)

FIX Message: CM to OCC	Position Maintenance Request

Overview

Expiring Exercise Declarations (EEDs) are instructions submitted by the Clearing Member to OCC in order to declare the intention to exercise an expiring position that is in-the-money above OCC's Ex-by-Ex threshold or to exercise an expiring position that is below OCC's Ex-by-Ex threshold. The Trade Sources (exchanges) require members to file the contrary notification by 6:00 p.m. (CT) on the last trading day prior to the expiration of an equity option contract.

Message Structure



Message Layout – Position Maintenance Request – Expiring Exercise Declaration

FIXML Message							Definitions		
Tag #	Report	Comp	Sub Comp	Sub Sub Comp	Field Name	Data	Data Type	Sample Data	Max Length
	PosMntReq								
709					TxnTyp	1 = Exercise	Int	1	1
715					BizDt	Business Date	LocalMktDate	2005-11-28	10
712					Actn	1 =New	Int	1	1
58					Txt	ALL	String	ALL	3
	→	Pty							
448					ID	Clearing Member Number	String	00123	5
452					R	Party Role 4 = Clearing Firm	Int	4	3
	→	→	Sub						
523					ID	Account Type (C/F/M)	String	M	1
803					Typ	26 = Position Account Type	Int	26	3
	→	→	/Sub						
	→	/Pty							
	→	Pty							
448					ID	Sub Account ID	String	ABCD	4
452					R	Party Role 38 = PositionAccount	Int	38	3
	→	/Pty							
	→	Instrmt							
55					Sym	Option Symbol	String	IBM	6
461					CFI	CHAR 1: O for Option CHAR 2: C for Call, P for Put	String	OCXXXX	6
200					MMY	Series/Contract Year, Month, Date	MonthYear	20051214	8 (4 for year, 2 for month, 2 for day)
202					StrkPx	Strike Price (Decimal Format only)	Price	30.50	14 (5 for the strike whole, 9 for the strike decimal)
	→	/Instrmt							
	→	Qty							
703					Typ	TOT = Total Transaction Qty	String	TOT	6

FIXML Message							Definitions		
Tag #	Report	Comp	Sub Comp	Sub Sub Comp	Field Name	Data	Data Type	Sample Data	Max Length
704					Long	Exercise Quantity	Int	10	7
	➔	/Qty							
	/PosMntReq								

Sample Message - Expiring Exercise Declaration

```
<FIXML r="20030618" s="20040109" v="4.4" xr="FIA" xv="1.1"
xmlns="http://www.fixprotocol.org/FIXML-4-4">
        <Batch BizDt="2005-11-28" TotMsg="1">
                <PosMntReq TxnTyp="1" Actn="1" BizDt="2005-11-28" Txt="ALL">
                        <Pty ID="00123" R="4">
                                <Sub ID="M" Typ="26"/>
                        </Pty>
                        <Pty ID="MBA" R="38"/>
                        <Instrmt Sym="AAO" CFI="OPXXXX" MMY="20051119" StrkPx="35.00"/>
                        <Qty Typ="TOT" Long="145"/>
                </PosMntReq>
        </Batch>
</FIXML>
```

NOTE: The formatting of the sample messages contained in this document is for display purposes only. Actual FIXML messages are contained on a single line and should not be broken into multiple lines or blocks. Messages formatted on more than one line will not be accepted.

Implementation Considerations

Transaction ID

In the first line of the message, users must identify the message type in the <PosMntReq> tag by entering "1" as the Transaction Type (TxnTyp). Entering this value indicates that this message refers to an Exercise. What differentiates the EED from an Exercise Notice is the Typ tag, which for an EED, is entered as "TOT" (Total Transaction Quantity).

"ALL" Indicator

The All Indicator field (Tag 58) indicates that the instruction is an EED All instruction and will be processed using the entire final long position quantity. If the All Indicator is set to "ALL", the transaction quantity (Tag 704) is overridden. If the All Indicator (Txt Tag) is not supplied, then the transaction quantity is the quantity that will be processed. If the expected exercise quantity is zero, then the transaction quantity should be "0000000" and the All Indicator (Txt Tag) should not be supplied.

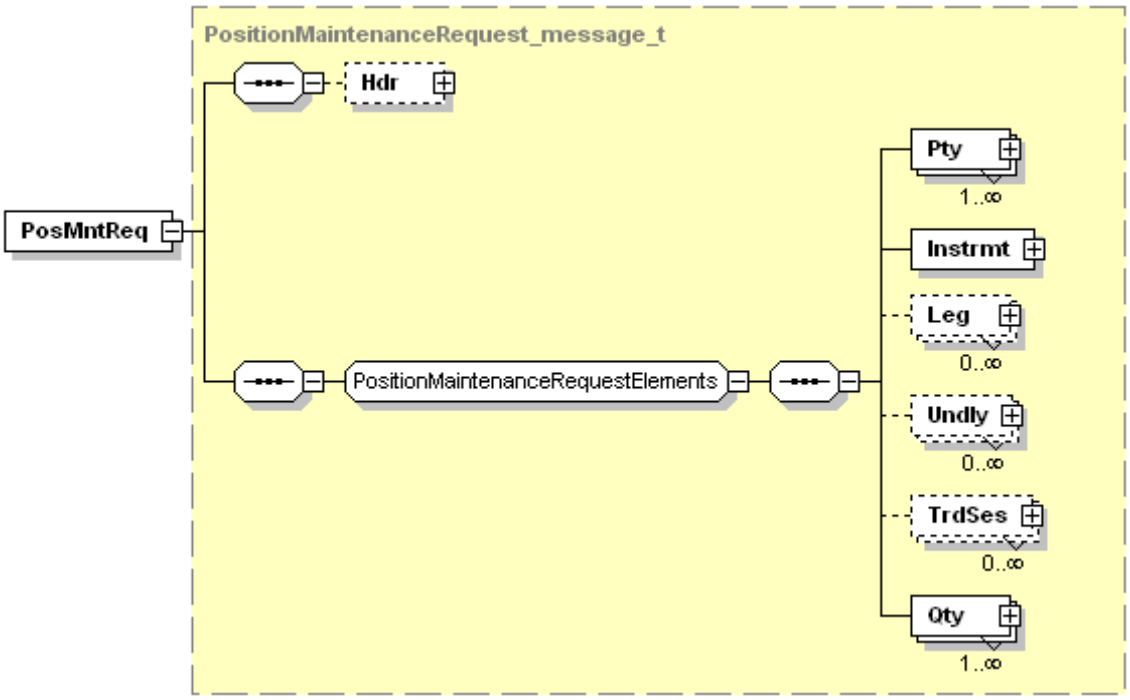
ENCORE Transmission: Gross Position Adjustments

FIX Message: CM to OCC	Position Maintenance Request

Overview

Gross Position Adjustments are included in the Position Maintenance Request and are valid for futures.

Message Structure



Message Layout – Position Maintenance Request - Gross Position Adjustments

FIXML Message							Definitions		
Tag #	Report	Comp	Sub Comp	Sub Sub Comp	Field Name	Data	Data Type	Sample Data	Max Length
	PosMntReq								
709					TxnTyp	3 = Position Adjustment	Int	3	1
715					BizDt	Business Date	LocalMktDate	2005-11-28	10
712					Actn	1 = New	Int	1	1
	→	Pty							
448					ID	Clearing Member Number	String	00123	5
452					R	Party Role 4 = Clearing Firm	Int	4	3
	→	→	Sub						
523					ID	Account Type (C/F/M)	String	M	1
803					Typ	26 = Position Account Type	Int	26	3
	→	→	/Sub						
	→	/Pty							
	→	Pty							
448					ID	Sub Account ID	String	KTZ	4
452					R	Party Role 38 = Position Account	Int	38	3
	→	/Pty							
	→	Instrmt							
461					CFI	CHAR 1: F for Futures	String	FXXXXX	6
55					Sym	Future Symbol	String	IBM1C	6
200					MMY	Series/Contract Year, Month, Date	MonthYear	20051214	8 (4 for year, 2 for month, 2 for day)
	→	/Instrmt							
	→	Qty							
703					Typ	PA = Adjustment Quantity	String	PA	6
704 or 705					Long or Short	Quantity	Int	10	7
	→	/Qty							
	/PosMntReq								

Sample Message - Gross Position Adjustments

```
<FIXML r="20030618" s="20040109" v="4.4" xr="FIA" xv="1.1"
xmlns="http://www.fixprotocol.org/FIXML-4-4">
        <Batch BizDt="2005-11-28" TotMsg="1">
        <PosMntReq TxnTyp="3" Actn="1" BizDt="2005-11-28">
                        <Pty ID="00123" R="4">
                                <Sub ID="M" Typ="26"/>
                        </Pty>
                        <Pty ID="MBA" R="38"/>
                        <Instrmt Sym="VX" CFI="FXXXXX" MMY="20050618"/>
                        <Qty Typ="PA" Long="3"/>
                </PosMntReq>
        </Batch>
</FIXML>
```

NOTE: The formatting of the sample messages contained in this document is for display purposes only. Actual FIXML messages are contained on a single line and should not be broken into multiple lines or blocks. Messages formatted on more than one line will not be accepted.

Implementation Considerations

General

- Gross Position Adjustments can only be entered for Futures transactions;
- No Strike Px value is needed. Users should only send the required tags in the blocks;

Transaction ID

In the first line of the message, users must identify the message type in the <PosMntReq> tag by entering "3" as the Transaction Type (TxnTyp). Entering this value indicates that this message refers to a Gross Position Adjustment.

ENCORE Transmission: Customer Gross Margin Positions

FIX Message: CM to OCC	Customer Gross Margin Positions

Overview

The CFTC Rule § 39.13(g)(8)(i) requires a derivatives clearing organization (DCO) to calculate initial margin requirements for customer positions so that the margin requirements are equal to the sum of requirements calculated for each individual customer account. This rule prohibits a DCO from netting positions of different customers against one another or allowing any risk offset between customer accounts.
Clearing Members must submit a daily file identifying the positions of each customer account. OCC will require one end of day file, which must be submitted by 8:00 p.m. CT.

Omnibus Accounts

This CFTC mandate does not require any changes in how clearing firms handle omnibus accounts. Firms may continue to hold omnibus accounts on their books, and these may be fully disclosed, partially disclosed, or entirely non-disclosed.
The file format supports all three of these possibilities:

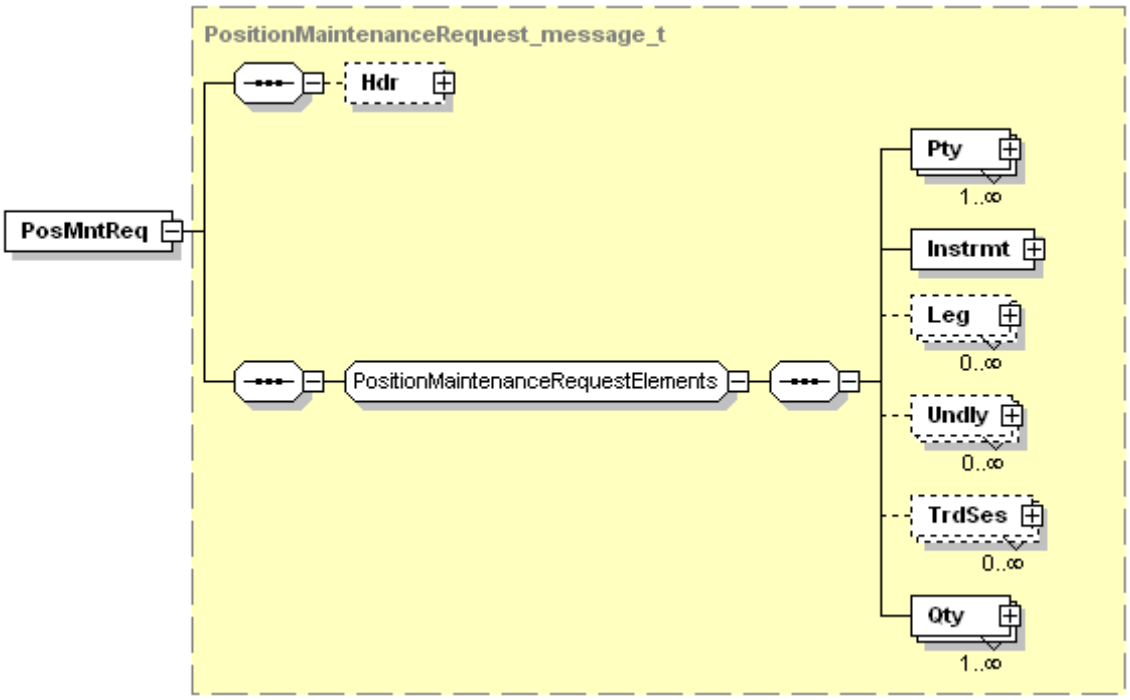
- If you provide an omnibus account with no detail accounts, this is the "entirely non-disclosed" case.
- If you provide an omnibus account with detail accounts, and the sum of the detail account positions is equal to the omnibus account positions, then the omnibus account is fully disclosed.
- If you provide detail accounts, but the sum of the positions in detail accounts is less than the positions in the omnibus account, then the omnibus account is partially disclosed.

Margins will be calculated as follows:
First, normal portfolio margin requirements are calculated for each disclosed subaccount. The remaining non-disclosed positions will be margined without recognizing any risk offsets. The total requirement for the omnibus account, then, is the sum of the portfolio requirements for the disclosed subaccounts, and the naked requirements for the non-disclosed positions.

Cross Margin Accounts

For OCC Cross Margin accounts, OCC Clearing Members will be required to submit two daily FIXML files identifying both the options and futures positions in each cross margin customer account. For the options positions, this would include any market maker accounts and JBO accounts. OCC will accept two files: one for options and one for futures from each firm. These files are required to be submitted by 8:00 p.m. CT.

Message Structure



Message Layout – Position Maintenance Request – Customer Gross Margin Position

FIXML Message							Definitions		
Tag #	Report	Comp	Sub Comp	Sub Sub Comp	Field Name	Data	Data Type	Sample Data	Max Length
	PosMntReq								
710					ReqID	Unique Request ID	String	123456789	20
709					TxnTyp	Transaction Type 4 = Position Change Submission/Margin Disposition	Int	4	1
718					AdjTyp	Adjustment Type 4 = Customer Specific Submission	Int	4	1
715					BizDt	Business date	LocalMkt Date	2012-05-16	10
712					Actn	1 = New	Int	1	1
716					SetSesID	Settlement Cycle	String	EOD	3
60					TxnTm	Submission Time	UTCTimestamp	2012-02-06T18:23:49	19
	➔	Pty							
448					ID	Clearing Organization	String	OCC	5
452					R	21 = Clearing Organization	Int	21	3
	➔	/Pty							
	➔	Pty							
448					ID	Exchange	String	CFE	6
452					R	22 = Exchange	Int	22	3
	➔	/Pty							
	➔	Pty							
448					ID	Trade Management Firm ID	String	123	5
452					R	1 = Executing Firm	Int	1	3
	➔	/Pty							
	➔	Pty							
448					ID	Clearing Member Number	String	00123	5
452					R	4 = Clearing Firm	Int	4	3
	➔	/Pty							
	➔	Pty							

FIXML Message							Definitions		
Tag #	Report	Comp	Sub Comp	Sub Sub Comp	Field Name	Data	Data Type	Sample Data	Max Length
448					ID	Position Account ID	String	QXO	4
452					R	38 = Position Account	Int	38	3
	→	/Pty							
	→	Pty							
448					ID	Customer Account ##	String	ABC12345	30
452					R	24 = Customer Account	Int	24	3
	→	→	→	Sub					
523					ID	Account Type C = Customer F = Firm M = Market Maker	String	C	1
803					Typ	26 = Position Account Type	Int	26	3
	→	→	→	/Sub					
	→	→	→	Sub					
523					ID	Legal Entity Identifier (LEI) Name	String	Billy Bob Trading LLC	255
803					Typ	5 = Full Legal Account Name	Int	5	3
	→	→	→	/Sub					
	→	→	→	Sub					
523					ID	Customer Account Type	String	H	1
803					Typ	41 = Customer Account Type	Int	41	3
	→	→	→	/Sub					
	→	→	→	Sub					
523					ID	Parent Omnibus Account	String	OMNIACCT	30
803					Typ	42 = Parent Omnibus Account	Int	42	3
	→	→	→	/Sub					
	→	/Pty							
	→	Pty							
448					ID	CFTC Reportable Account Number	String	12345678ABC	12
452					R	52 = LTR Account Number	Int	52	3
	→	/Pty							

FIXML Message							Definitions		
Tag #	Report	Comp	Sub Comp	Sub Sub Comp	Field Name	Data	Data Type	Sample Data	Max Length
	➔	Pty							
448					ID	US Legal Entity Indentifier (LEI) Number	String	ABCD123456789	20
452					R	7 = LEI Number	Int	7	3
447					SRV	LEI Source	String	N	1
	➔	/Pty							
	➔	Instrmt							
207					Exch	Security Exchange	String	CFE	4
48					ID	Security ID (Symbol)	String	VX	6
22					Src	Security ID Source	String	H	1
167					SecTyp	Security Type FUT = Future OPT = Option OOF = Option on Future	String	FUT	9
200						Series/Contract Year, Month, Date	MonthYear	20120831	8 (4 for year, 2 for month, 2 for day)
201					PutCall	Put / Call Indicator 0 = Put 1 = Call	Int	0	1
202					StrkPx	Strike Price	Price	30.50	14 (5 for the strike whole, 9 for the strike decimal)
	➔	/Instrmt							
	➔	Qty							
703					Typ	TQ = Transaction Qty	String	TQ	6
704					Long	Long Quantity	Int	35	7
705					Short	Short Quantity	Int	18	7
	➔	/Qty							
	/PosMntReq								

Sample Messages – Customer Gross Margin Position

Customer Gross Martin Position – Required Tags Only

The below sample message contains only the tags that are required by OCC for Customer Gross Margin Positions. Other DCOs may require additional tags, while other accounts (such as a disclosed omnibus account) would also require additional tags.

```
<FIXML r="20030618" s="20040109" v="4.4" xr="FIA" xv="1.1"
xmlns="http://www.fixprotocol.org/FIXML-4-4">
        <Batch BizDt="2012-05-16" TotMsg="11">
                <PosMntReq TxnTyp="4" AdjTyp=”4” Actn="1" BizDt="2012-05-16"
                SetSesID="EOD">
                        <Pty ID="00123" R="4"/>
                        <Pty ID="ABC12345" R="24">
                            <Sub ID=”C” Typ=”26”/>
                        </Pty>
                        <Instrmt ID="VX" SecTyp=”FUT” MMY="20120831" />
                                <Qty Typ="TQ" Long="35" Short=”18”/>
                </PosMntReq>
        </Batch>
</FIXML>
```

Customer Gross Martin Position – Include Legal Entity Identifier (LEI)

The below sample message contains optional LEI tags. Note that LEI tags require FIXML version 5.0.

```
"<FIXML r=20030618 s="20040109" v="5.0" xr="FIA" xv="1" xmlns="http://www.fixprotocol.org/FIXML-
5-0">"
        <Batch BizDt="2018-01-29" TotMsg="1">
                <PosMntReq TxnTyp="4" AdjTyp="4" BizDt="2018-01-29" Actn="1" SetSesID="EOD">
                        <Pty ID="00840" R="4"/>
                        <Pty ID="ABC12345" R="24">
                                <Sub ID="F" Typ="26"/>
                                <Sub ID="Acme Trading Co" Typ="5"/>
                        </Pty>
                        <Pty ID="1234ABC" R="52"/>
                        <Pty ID="LEI 123" R="7" Src="N"/>
                        <Instrmt ID="SPXW" SecTyp="OPT" MMY="20180209" PutCall="0"
                        StrkPx="2800"/>
                        <Qty Typ="TQ" Long="0" Short="125"/>
                </PosMntReq>
        </Batch>
</FIXML>
```

NOTE: The formatting of the sample messages contained in this document is for display purposes only. Actual FIXML messages are contained on a single line and should not be broken into multiple lines or blocks. Messages formatted on more than one line will not be accepted.

Implementation Considerations

The user must identify the <PosMntReqt> as a Customer Gross Margin submission by utilizing tags in the message as follows:

Field Name	Value
TxnTyp	4 = Position Submission
AdjTyp	4 = Customer Gross Margin-Specific Submission
Qty	Typ = "TQ"

If the account is a disclosed subaccount of an omnibus account, the “omnibus account” role specifies that omnibus account. It should not be provided for detail accounts that are not disclosed subaccounts of an omnibus account.

Options on Futures

The MMY tag needs to include the Series Contract Date, not the Expiration Date. For example, the June 2010 option on futures expires in May. The Expiration Date is 5/25/2010, but the Contract Series date is 6/28/2010.

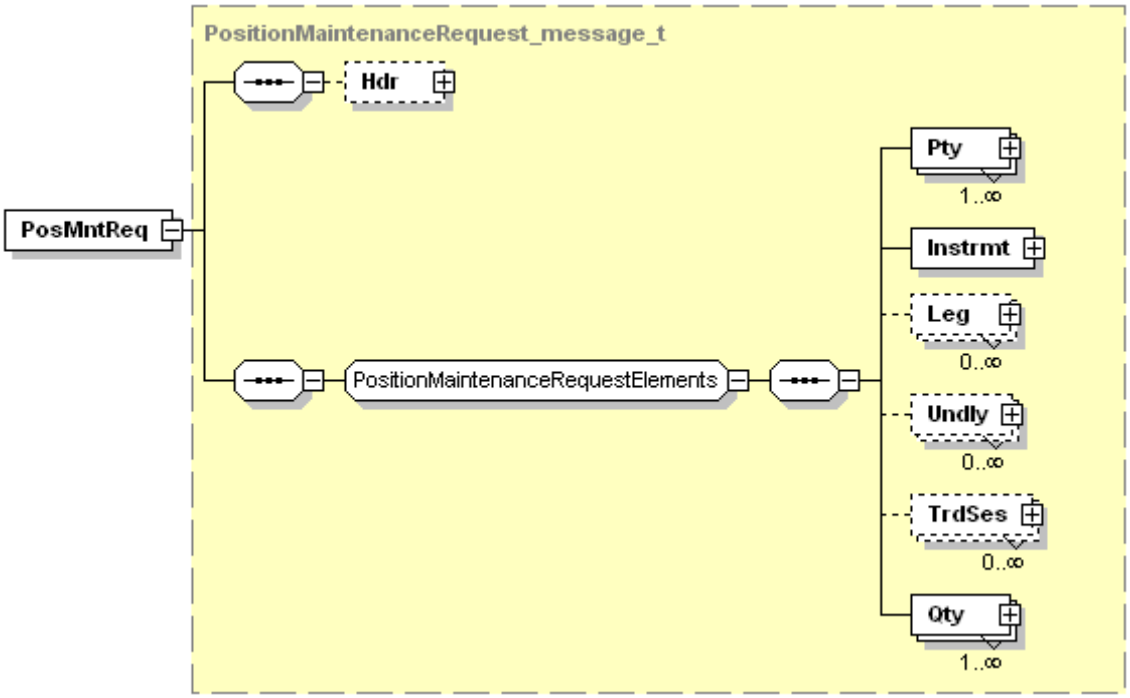
ENCORE Transmission: Position Change Submissions

FIX Message: CM to OCC	Position Maintenance Request

Overview

Position Change Submissions (PCS) allow Clearing Members to submit instructions to adjust their closing position quantities. OCC will attempt to adjust positions so that they match the submitted ending quantity. PCS transactions are sent in the Position Maintenance Request FIXML message and are valid for futures and futures options. PCS transactions will be processed as GPA's.

Message Structure



Message Layout – Position Maintenance Request - Position Change Submission

FIXML Message							Definitions		
Tag #	Report	Comp	Sub Comp	Sub Sub Comp	Field Name	Data	Data Type	Sample Data	Max Length
	PosMntReq								
709					TxnTyp	4 = Position Change Submission/Margin Disposition	Int	4	1
715					Bizdt	Business Date	LocalMkt Date	2006-11-28	10
712					Actn	1 = New 3 = Cancel	Int	3	1
58					Txt	Optional Data	String		25
	➔	Pty							
448					ID	Clearing Member Number	String	00123	5
452					R	Party Role 4 = Clearing Firm	Int	4	3
	➔	➔	Sub						
523					ID	Account Type (C/F/M)	String	M	1
803					Typ	Position Account Type	Int	26	3
	➔	➔	/Sub						
	➔	/Pty							
	➔	Pty							
448					ID	Sub Account ID	String	M	4
452					R	Party Role 38 = Position Account	Int	38	3
	➔	/Pty							
	➔	Instrmnt							
55					Sym	Option/Future Symbol	String	AAPL1C	6
461					CFI	CHAR1; O for Option, F for Future CHAR 2; C for Call, P for Put	String	FXXXXX	6
200					MMY	Series/Contract Year,	MonthYear	20061214	8 (4 for year, 2 for month, 2 for

FIXML Message							Definitions		
Tag #	**Report**	**Comp**	**Sub Comp**	**Sub Sub Comp**	**Field Name**	**Data**	**Data Type**	**Sample Data**	**Max Length**
						Month, Date			day)
202					StrkPx	Strike Price (Decimal Format only – options on futures only)	Price	30.50	14 (5 for the strike whole, 9 for the strike decimal)
	➔	/Instrmt							
	➔	Qty							
703					Typ	TQ = Transaction Qty	String	TQ	6
704					Long	Long Quantity	Int	10	7
	➔	/Qty							
	/Pos MntReq								

Sample Message – Position Change Submission

```
<FIXML r="20030618" s="20040109" v="4.4" xr="FIA" xv="1.1"
xmlns="http://www.fixprotocol.org/FIXML-4-4">
        <Batch BizDt="2007-01-31" TotMsg="11">
                <PosMntReq TxnTyp="4" Actn="1" BizDt="2007-01-31">
                        <Pty ID="00123" R="4">
                                <Sub ID="M" Typ="26" />
                        </Pty>
                        <Pty ID="QXO" R="38">
                                <Sub />
                        </Pty>
                        <Instrmt Sym="CSCO1C" CFI="FXXXXX" MMY="20080215" />
                                <Qty Typ="TQ" Long="0000300" />
                </PosMntReq>
        </Batch>
</FIXML>
```

NOTE: The formatting of the sample messages contained in this document is for display purposes only. Actual FIXML messages are contained on a single line and should not be broken into multiple lines or blocks. Messages formatted on more than one line will not be accepted.

Implementation Considerations

The user must identify the <PosMntReqt> tag in the message as the following:

Field Name	**Value**
TxnTyp	4 (Position Change Submission)
Qty	Typ = "TQ"

Any transactions that have more than one Qty tag will be rejected.

Options on Futures

The MMY tag needs to include the Series Contract Date, not the Expiration Date. For example, the June 2010 option on futures expires in May. The Expiration Date is 5/25/2010 but the Contract Series date is 6/28/2010.

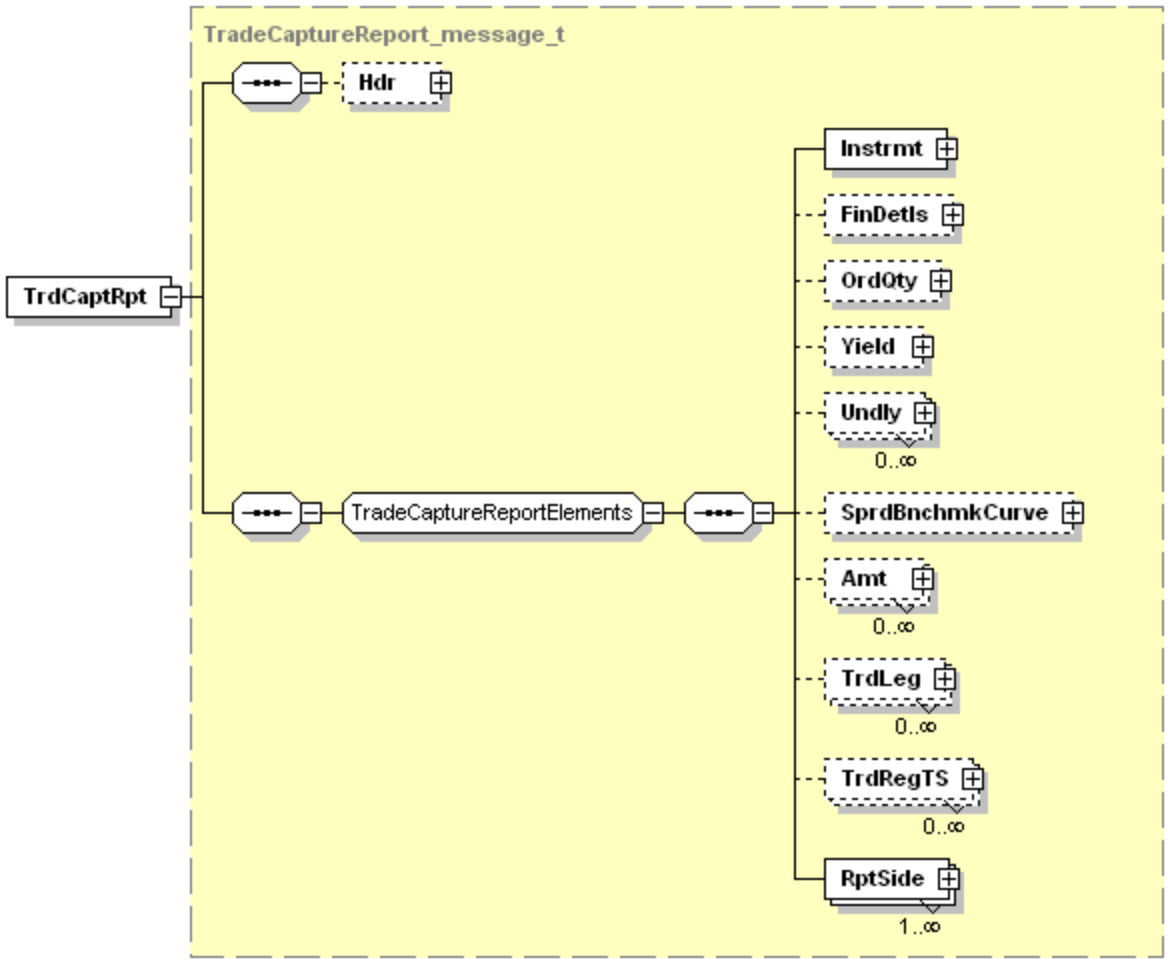
ENCORE Transmission: Transfers of Account

FIX Message: CM to OCC	Trade Capture Report

Overview

Clearing Members use Transfers of Account to transfer a position from one Clearing Member to another. All transfers of account must be approved by the contra party.

Message Structure



Message Layout – Trade Capture Report –Transfer of Account

FIXML Message							Definitions		
Tag #	Report	Comp	Sub Comp	Sub Sub Comp	Field Name	Data	Data Type	Sample Data	Max Length
	TrdCaptRpt								
828					TrdTyp	3 = Transfer 2 = EFP 1 = Block Trade	Int	3	1
829					TrdSubTyp	2 = External Transfer	Int	2	1
75					TrdDt	Trade As Of Date	Date	2005-12-02	10
715					BizDt	Business Date	LocalMkt Date	2005-12-02	10
32					LastQty	Contracts to be Transferred	Qty	15	7
31					LastPx	Trade Price (Could be negative for futures only)	Price	55.25	10 (5 for whole part, 5 for decimal part)
	→	Instrmt							
55					Sym	Symbol	String	IBM	6
461					CFI	CHAR 1: O for Option, F for Futures CHAR 2: C for Call, P for Put	String	OCXXXX FXXXXX	6
200					MMY	Series/Contract Year, Month, Date	MonthYear	20051214	8 (4 for year, 2 for month, 2 for day)
202					StrkPx	Strike Price (Decimal Format only) – options only	Price	30.50	14 (5 for the strike whole, 9 for the strike decimal)
	→	/Instrmt							
	→	RptSide							
54					Side	1 = Buy 2 = Sell	Int	1	1
77					PosEfct	Open/Close Code	String	O	1
58					Txt	Optional Data	String	Transfer	25
	→	→	Pty						
448					ID	Clearing Member Number	String	00123	5
452					R	Party Role 1 = Executing Firm	Int	1	3
	→	→	→	Sub					
523					ID	Account Type (C/F/M)	String	M	1
803					Typ	26 = Position Account Type	Int	26	3

FIXML Message							Definitions		
Tag #	Report	Comp	Sub Comp	Sub Sub Comp	Field Name	Data	Data Type	Sample Data	Max Length
	→	→	→	/Sub					
	→	→	/Pty						
	→	→	Pty						
448					ID	Sub Account ID	String	KTZ	4
452					R	Party Role 38 = Position Account	Int	38	3
	→	→	/Pty						
	→	→	Pty						
448					ID	Account Number	String	ABC123	20
452					R	Party Role 24 = Customer Account	Int	24	2
	→	→	/Pty						
	→	/RptSide							
	→	RptSide							
54					Side	1 = Buy 2 = Sell	Int	2	1
77					PosEfct	Open/Close Code	String	C	1
	→	→	Pty						
448					ID	Contra Clearing Member Number	String	00456	5
452					R	Party Role 18 = Contra Clearing Firm	Int	18	3
	→	→	→	Sub					
523					ID	Account Type (C/F/M)	String	C	1
803					Typ	26 = Position Account Type	Int	26	3
	→	→	→	/Sub					
	→	→	/Pty						
	→	→	Pty						
448					ID	Sub Account ID	String	XYZ	4
452					R	Party Role 38 = Position Account	Int	38	3
	→	→	/Pty						
	→	→	Pty						
448					ID	Account Number	String	DEF456	20
452					R	Party Role 24 = Customer Account	Int	24	2

FIXML Message							Definitions		
Tag #	Report	Comp	Sub Comp	Sub Sub Comp	Field Name	Data	Data Type	Sample Data	Max Length
	➔	➔	/Pty						
	➔	/RptSide							
	TrdCaptRpt								

Sample Message – Transfers of Account Options

```
<FIXML r="20030618" s="20040109" v="4.4" xr="FIA" xv="1.1"
xmlns="http://www.fixprotocol.org/FIXML-4-4">
        <Batch BizDt="2005-11-28" TotMsg="1">
                <TrdCaptRpt LastQty="230" LastPx="0.00" TrdDt="2005-11-28" BizDt="2005-11-28"
TrdTyp="3" TrdSubTyp="2">
                        <Instrmt Sym="WSM" CFI="OCXXXX" MMY="20051217" StrkPx="35.00"/>
                        <RptSide Side="1" PosEfct="O" Txt="Transfers Of Account">
                                <Pty ID="00123" R="1">
                                        <Sub ID="M" Typ="26"/>
                                </Pty>
                                <Pty ID="MBA" R="38"/>
                                <Pty ID="123456" R="24"/>
                        </RptSide>
                        <RptSide Side="2" PosEfct="C">
                                <Pty ID="00456" R="18">
                                        <Sub ID="M" Typ="26"/>
                                </Pty>
                                <Pty ID="MBB" R="38"/>
                                <Pty ID="654321" R="24"/>
                        </RptSide>
                </TrdCaptRpt>
        </Batch>
</FIXML>
```

NOTE: The formatting of the sample messages contained in this document is for display purposes only. Actual FIXML messages are contained on a single line and should not be broken into multiple lines or blocks. Messages formatted on more than one line will not be accepted.

Sample Message – Transfers of Account Futures

```
<FIXML r="20030618" s="20040109" v="4.4" xr="FIA" xv="1.1"
xmlns="http://www.fixprotocol.org/FIXML-4-4">
        <Batch BizDt="2005-11-28" TotMsg="1">
                <TrdCaptRpt LastQty="230" LastPx="1.50" TrdDt="2005-11-28" BizDt="2005-11-28"
TrdTyp="2" TrdSubTyp="2">
                        <Instrmt Sym="WSM" CFI="FXXXXX" MMY="20051217"/>
                        <RptSide Side="1" PosEfct="O" Txt="Transfer">
                                <Pty ID="00123" R="1">
                                        <Sub ID="M" Typ="26"/>
                                </Pty>
                                <Pty ID="MBA" R="38"/>
                                <Pty ID="123456" R="24"/>
                        </RptSide>
                        <RptSide Side="2" PosEfct="C">
                                <Pty ID="00456" R="18”>
                                        <Sub ID="M" Typ="26"/>
                                </Pty>
                                <Pty ID="MBB" R="38"/>
                                <Pty ID="654321" R="24"/>
                        </RptSide>
                </TrdCaptRpt>
        </Batch>
</FIXML>
```

NOTE: The formatting of the sample messages contained in this document is for display purposes only. Actual FIXML messages are contained on a single line and should not be broken into multiple lines or blocks. Messages formatted on more than one line will not be accepted.

Implementation Considerations

General

Transfers of Account are most commonly used to transfer positions from one member to another. This same functionality also supports the creation of positions stemming from off exchange Block and EFP transactions.

Entering Exchange for Physical (EFP) as a Trade Type (TrdTyp=2) is only allowed for CFTC regulated products.

Entering Block Trade as a Trade Type (TrdTyp=1) is only allowed for CFTC regulated products.

Transaction Information

Users must identify the message type in the TrdTyp tag by entering "3", "2", or "1" as the Trade Type.

- Trade Type "3" indicates that this message refers to a Transfer.
- Trade Type "2" indicates that this message refers to an Exchange for Physical.
- Trade Type "1" indicates that this message refers to a Block Trade.

In each case the Trade Sub Type (TrdSubTyp) is used to further differentiate between types of transfers. For Transfers of Account, enter a Trade Sub Type of "2". Entering this value indicates that this message refers to an external Transfer of Account.

The most common transaction will be a standard transfer of account where TrdTyp="3" and TrdSubTyp="2". Less common are Block Trades (TrdTyp="1" & TrdSubTyp="2") and EFPs (TrdTyp="1" & TrdSubTyp="2").

With Inbound FIXML messages, if the first character of the CFI Code is "O", then this product is an Option. Similarly, if the first character of the CFI Code is "F", then this product is a Future. For example, CFI="**OCXXXX**" would indicate that this is an Option Call, while CFI="**FXXXXX**" would refer to a Future.

Role

The Role tag (R) is found within the Party sub-component and is used to indicate the party's role in the transaction. This tag is commonly used to determine Originating Clearing Member (R="1") versus the Contra Clearing Member (R="18"). For example, the first sample message from above contains the tag: < Pty ID="**00123**" R="**1**">. This indicates that Clearing Member 00123 is the executing/source firm in the transaction. Similarly, the tag later in the same message, <Pty ID="**00456**" R="**18**">, indicates that Clearing Member 00456 is the contra/target firm to the transfer.

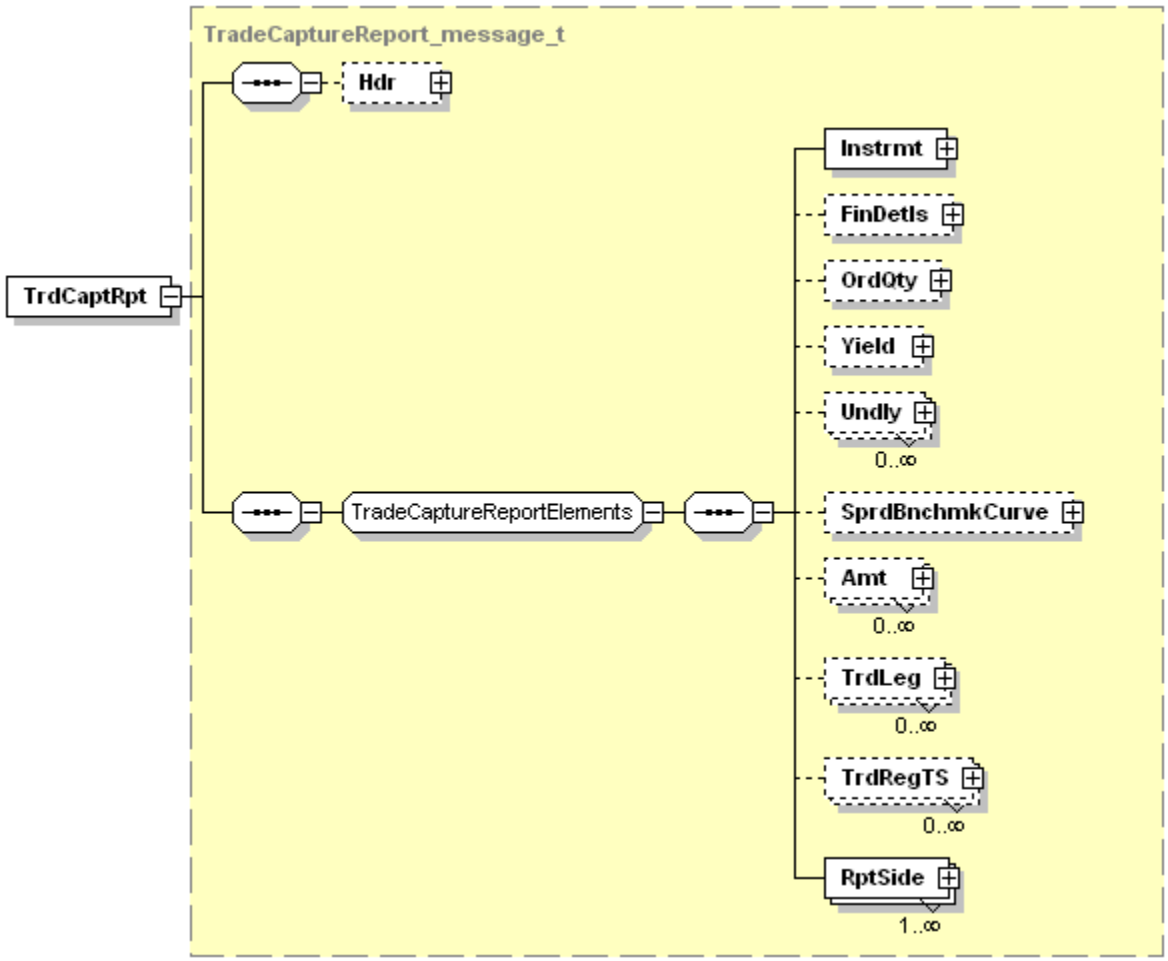
ENCORE Transmission: CMTA Transfers

FIX Message: CM to OCC (New)	Trade Capture Report

Overview

A CMTA is an agreement between two Clearing Members, which allows one Clearing Member to execute trades for give up to another Clearing Member in whose account the trade will settle. CMTA Transfers are used to correct CMTA Trades that may have miscleared.

Message Structure



Message Layout – Trade Capture Report – CMTA Transfers

FIXML Message							Definitions		
Tag #	**Report**	**Comp**	**Sub Comp**	**Sub Sub Comp**	**Field Name**	**Data**	**Data Type**	**Sample Data**	**Max Length**
	TrdCaptRpt								
828					TrdTyp	3 = Transfer or 2 = EFP Transfer (Futures Only)	Int	3	1
829					TrdSubTyp	0 = CMTA	Int	0	1
75					TrdDt	Trade As Of Date	Date	2005-12-02	10
715					BizDt	Business Date	LocalMkt Date	2005-12-02	10
32					LastQty	Contracts to be Transferred	Qty	15	7
31					LastPx	Trade Price	Price	32.50	11 (5 for whole part, 6 for decimal part)
	➔	Instrmt							
207					Exch	Exchange Code (MIC)	String	XASE	4
55					Sym	Symbol	String	IBM	6
461					CFI	CHAR 1: O for Option, F for Futures CHAR2: C for Call, P for Put	String	OCXXXX	6
200					MMY	Series/Contract Year, Month, Date	MonthYear	20051214	8 (4 for year, 2 for month, 2 for day)
202					StrkPx	Strike Price (Decimal Format only) – options only	Price	30.50	14 (5 for the strike whole, 9 for the strike decimal)
	➔	/Instrmt							
	➔	TrdLeg							
990					RptID	Trade ID Block repeats for each Trade ID supplied	String	072807111	20
	➔	/TrdLeg							
	➔	RptSide							
54					Side	1 = Buy, 2 = Sell	Int	1	1
77					PosEfct	Open/Close Code	String	O	1

FIXML Message							Definitions		
Tag #	Report	Comp	Sub Comp	Sub Sub Comp	Field Name	Data	Data Type	Sample Data	Max Length
58					Txt	Optional Data	String	CMTA Transfer	25
CUST					ORFInd	Option Regulatory Fee Indicator Y = Firm is taking back a CMTA and fees should move in reverse Note: Omit this tag if it does not apply.	String	Y	1
	→	→	Pty						
448					ID	Clearing Member Number	String	00123	5
452					R	Party Role 1 = ExecutingFirm	Int	1	3
	→	→	→	Sub					
523					ID	Account Type (C/F/M)	String	M	1
803					Typ	26 = Position Account Type	Int	26	3
	→	→	→	/Sub					
	→	→	/Pty						
	→	→	Pty						
448					ID	Sub Account ID	String	KTZ	4
452					R	Party Role 38 = PositionAccount	Int	38	3
	→	→	/Pty						
	→	→	Pty						
448					ID	Account Number	String	ABC123	10
452					R	Party Role 24 = Customer Account	Int	24	
	→	→	/Pty						
	→	/RptSide							
	→	RptSide							
54					Side	1 = Buy, 2 = Sell	Int	2	1
77					PosEfct	Open/Close Code	String	C	1
	→	→	Pty						

FIXML Message							Definitions		
Tag #	Report	Comp	Sub Comp	Sub Sub Comp	Field Name	Data	Data Type	Sample Data	Max Length
448					ID	Contra Clearing Member Number	String	00456	5
452					R	Party Role 18 = Contra Clearing Firm	Int	1	3
	➔	➔	➔	Sub					
523					ID	Account Type (C/F/M)	String	M	1
803					Typ	26 = Position Account Type	Int	26	3
	➔	➔	➔	/Sub					
	➔	➔	/Pty						
	➔	➔	Pty						
448					ID	Sub Account ID	String	XYZ	4
452					R	Party Role 38 = PositionAccount	Int	38	3
	➔	➔	/Pty						
	➔	➔	MiscFees						
137					Amt	Fee Amount	Amt	189.75	8 (4 for whole part, 4 for decimal part)
139					Typ	Type of Fees 3 = Commission Fee 7 = Reportable Fees	String	3	2
891					Basis	Unit of Fees 0 = Flat Fee 1 = Rate Fee	Int	0	1
	➔	➔	/MiscFees						
	➔	/RptSide							
	/TrdCaptRpt								

Sample Message – CMTA Transfers Options

```
<FIXML r="20030618" s="20040109" v="4.4" xr="FIA" xv="1.1"
xmlns="http://www.fixprotocol.org/FIXML-4-4">
        <Batch BizDt="2005-11-28" TotMsg="1" >
                <TrdCaptRpt LastQty="73" LastPx="200.60" TrdDt="2005-11-28" BizDt="2005-11-28"
                TrdTyp="3" TrdSubTyp="0">
                        <Instrmt Sym="CJJ" CFI="OCXXXX" MMY="20050917" StrkPx="940.00"
                        Exch="XASE"/>
                        <TrdLeg RptID=”072807111”/>
                        <TrdLeg RptID=”072807122”/>
                        <RptSide Side="2" PosEfct="C" Txt="CMTA Transfer" ORFInd="Y" >
                                <Pty ID="00123" R="1">
                                        <Sub ID="M" Typ="26"/>
                                </Pty>
                                <Pty ID="123456" R="24"/>
                                <Pty ID="MBA" R="38"/>
                        </RptSide>
                        <RptSide Side="1" PosEfct="O">
                                <Pty ID="00456" R="18">
                                        <Sub ID="M" Typ="26"/>
                                </Pty>
                                <Pty ID="MBB" R="38"/>
                                <MiscFees Amt=“189.75” Type=”3” Basis=“0”/>
                                <MiscFees Amt=“28.00” Type=”7” />
                        </RptSide>
                </TrdCaptRpt>
        </Batch>
</FIXML>
```

NOTE: The formatting of the sample messages contained in this document is for display purposes only. Actual FIXML messages are contained on a single line and should not be broken into multiple lines or blocks. Messages formatted on more than one line will not be accepted.

Sample Message – CMTA Transfers Futures

```
<FIXML r="20030618" s="20040109" v="4.4" xr="FIA" xv="1.1"
xmlns="http://www.fixprotocol.org/FIXML-4-4">
        <Batch BizDt="2005-11-28" TotMsg="1" >
                <TrdCaptRpt LastQty="0000073" LastPx="200.60" TrdDt="2004-09-16" BizDt="2005-09-
        16" TrdTyp="3" TrdSubTyp="0">
                        <Instrmt Sym="IBM1C" CFI="FXXXXX" MMY="20050917" Exch="XCBF"/>
                        <RptSide Side="2" PosEfct="C" Txt="CMTA Transfer">
                                <Pty ID="00123" R="1">
                                        <Sub ID="M" Typ="26"/>
                                </Pty>
                                <Pty ID="123456" R="24"/>
                                <Pty ID="MBA" R="38"/>
                        </RptSide>
                        <RptSide Side="1" PosEfct="O">
                                <Pty ID="00456" R="18">
                                        <Sub ID="M" Typ="26"/>
                                </Pty>
                                <Pty ID="MBB" R="38"/>
                        </RptSide>
                </TrdCaptRpt>
        </Batch>
</FIXML>
```

NOTE: The formatting of the sample messages contained in this document is for display purposes only. Actual FIXML messages are contained on a single line and should not be broken into multiple lines or blocks. Messages formatted on more than one line will not be accepted.

Implementation Considerations

General

Entering Exchange for Physical (EFP) as a Trade Type (TrdTyp=2) is only allowed for Futures transactions. Within the FIXML Message format, Trade Price (LastPx) must be entered. Trade Price must be entered in dollars and cents and only one LastPx tag can be included in the message.

Transaction ID

In the first line of the message, users must identify the message type in the TrdTyp tag by entering "3" or "2" as the Trade Type. Trade Type "3" indicates that this message refers to a Transfer. To identify Exchange for Physical on the message Trade Type "2" is used. The Trade Sub Type (TrdSubTyp) is used to further differentiate between types of transfers. For CMTA Transfers, enter a Trade Sub Type of "0" to indicate this message refers to a CMTA Transfer.

Customer Account Number/ID

The Customer Account Number value (ID value within a Pty block with R=24) is required for all CMTA transfers. The value will contain customer information that is agreed upon by the executing and give-up clearing members. This field will not be validated by OCC's ENCORE system. However, an otherwise valid CMTA transfer will be rejected if it does not contain a Customer Account Number value.

Exchange Codes

This field (Tag 207) indicates the financial exchange for which the CMTA Agreement is setup. The FIX specification uses MIC codes as Exchange Codes. Each of the following exchange names and their related exchange acronyms are mapped to a MIC.

Exchange Name	Exchange Acronym	MIC
BOX Exchange, LLC	BOX	XBOX
Cboe BZX Options Exchange	BATS	BATO
Cboe C2 Options Exchange	C2	C2OX
Cboe EDGX Options Exchange	EDGX	EDGO
Cboe Futures Exchange	CFE	XCBF
Cboe Options Exchange	CBOE	XCBO
MEMX LLC	MEMX	MXOP
MIAX Emerald, LLC	EMLD	EMLD
MIAX Options Exchange	MIAX	XMIO
MIAX PEARL, LLC	MPRL	MPRL
MIAX Sapphire, LLC	SPHR	SPHR
Nasdaq BX Options	NOBO	XBXO
Nasdaq GEMX	GEM	GMNI
Nasdaq ISE	ISE	XISX
Nasdaq MRX	MCRY	MCRY
Nasdaq Options Market	NSDQ	XNDQ
Nasdaq PHLX, LLC	PHLX	XPHO
NYSE American Options	AMEX	XASE
NYSE Arca Options	ARCA	XPSE

Exchange Name	Exchange Acronym	MIC
Small Exchange, Inc.	SML	SMFE

Report Sides

The Report Sides tag (RptSide) is used to indicate which block of tags refers to the Buy Side (Side = 1) and which block refers to the Sell Side (Side = 2).

Miscellaneous Fees

Miscellaneous Fees are optional fees that can include commission and regulatory fees, which will move from the executing firm to the give up firm. Any fees must be included in the give-up's side of the message. If the fees are included on the executor's side, they will not be processed. If there are no fees, do not include the Misc Fees block.
Commission Fees: The maximum value for the flat fee is $50,000.00 per transaction. The maximum value for the rate fee is $9.99 per contract.
Reportable Fees: The maximum value for the reportable fee is $50,000.00 per transaction.
Commission Fee Basis: Users must select the commission fee as either a rate fee (per contract) or a flat fee (total fee).

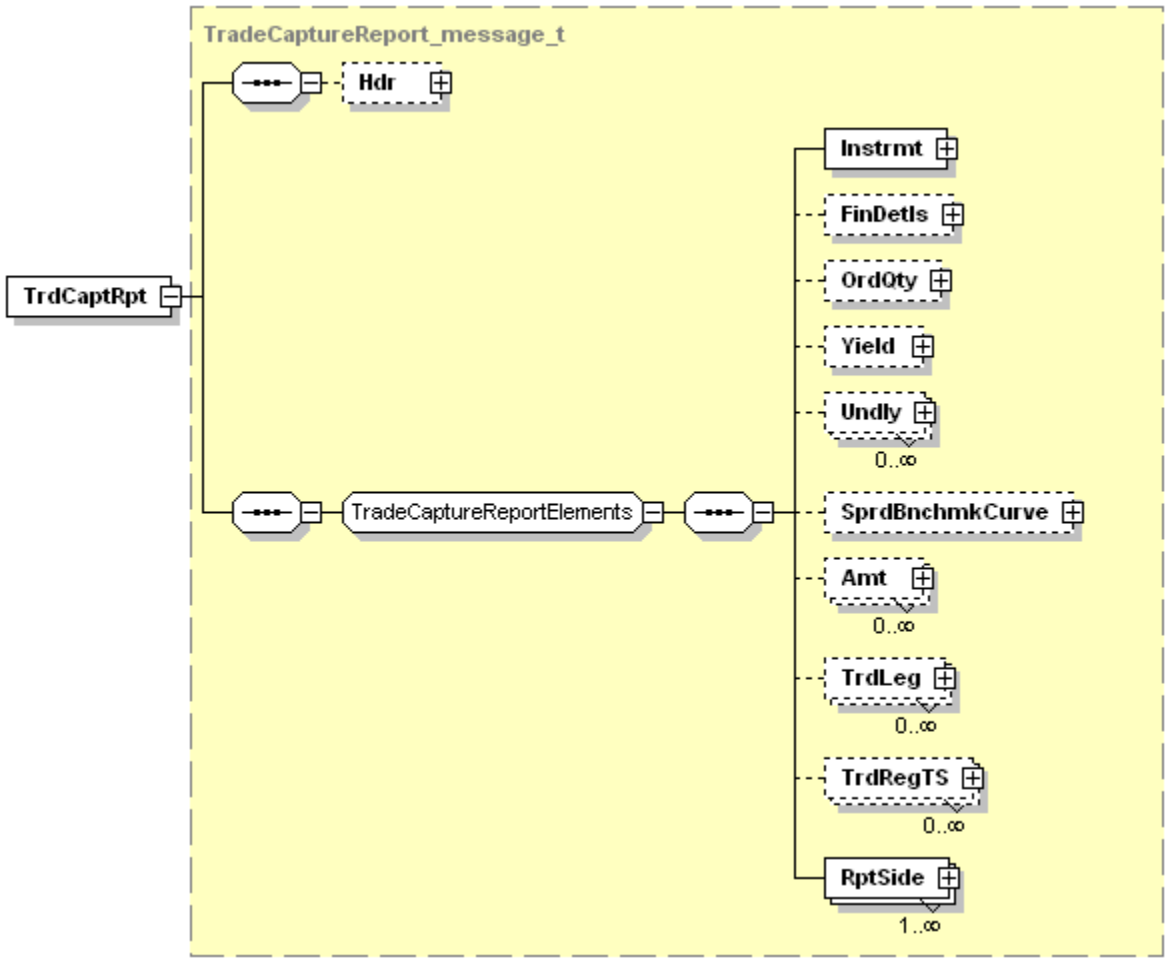
ENCORE Transmission: Position Adjustment

FIX Message: CM to OCC	Trade Capture Report

Overview

Clearing Members may submit position adjustment transactions to OCC to correct trade errors within accounts of the same Clearing Member, such as account type errors or open/close errors. Position Adjustments cannot be used to change the terms of compared trades.

Message Structure



Message Layout – Trade Capture Report – Position Adjustment

FIXML Message							Definitions		
Tag #	**Report**	**Comp**	**Sub Comp**	**Sub Sub Comp**	**Field Name**	**Data**	**Data Type**	**Sample Data**	**Max Length**
	TrdCaptRpt								
828					TrdTyp	3 = Transfer or 2 = EFP Transfer (Futures Only)	Int	3	1
829					TrdSubTyp	1 = Internal Transfer	Int	1	1
75					TrdDt	Trade As Of Date	Date	2005-12-02	10
715					BizDt	Business Date	LocalMkt Date	2005-12-02	10
32					LastQty	Contract Quantity	Qty	15	7
31					LastPx	Trade Price (Could be negative for futures only)	Price	55.35	10 (5 for whole part, 5 for decimal part)
	→	Instrmt							
55					Sym	Symbol	String	IBM	6
461					CFI	CHAR 1: O for Options, F for Futures CHAR 2: C for Call, P for Put	String	OCXXXX FXXXXX	6
200					MMY	Series/Contract Year, Month, Date	MonthYear	20051214	8 (4 for year, 2 for month, 2 for day)
202					StrkPx	Strike Price (Decimal Format only) – options only	Price	30.50	14 (5 for the strike whole, 9 for the strike decimal)
	→	/Instrmt							
	→	RptSide							
54					Side	1 = Buy, 2 = Sell	Int	2	1
77					PosEfct	Open/Close Code	String	C	1
58					Txt	Optional Data	String	Adjustment	25
	→	→	Pty						
448					ID	Clearing Member Number	String	00123	5
452					R	Party Role 1 = Executing Firm	Int	1	3
	→	→	→	Sub					
523					ID	Account Type (C/F/M)	String	C	1
803					Typ	26 = Position Account Type	Int	26	3

FIXML Message							Definitions		
Tag #	Report	Comp	Sub Comp	Sub Sub Comp	Field Name	Data	Data Type	Sample Data	Max Length
	→	→	→	/Sub					
	→	→	/Pty						
	→	→	Pty						
448					ID	Sub Account ID	String	KTZ	4
452					R	Party Role 38 = Position Account	Int	38	3
	→	→	/Pty						
	→	/RptSide							
	→	RptSide							
54					Side	1 = Buy, 2 = Sell	Int	1	1
77					PosEfct	Open/Close Code	String	O	1
	→	→	Pty						
	→	→	→	Sub					
523					ID	Account Type (C/F/M)	String	M	1
803					Typ	26 = Position Account Type	Int	26	3
	→	→	→	/Sub					
	→	→	/Pty						
	→	→	Pty						
448					ID	Sub Account ID	String	KTZ	4
452					R	Party Role 38 = Position Account	Int	38	3
	→	→	/Pty						
	→	/RptSide							
	TrdCaptRpt								

Sample Message - Position Adjustment Option

```
<FIXML r="20030618" s="20040109" v="4.4" xr="FIA" xv="1.1"
xmlns="http://www.fixprotocol.org/FIXML-4-4">
        <Batch BizDt="2005-11-28" TotMsg="1" >
                <TrdCaptRpt LastQty="50" LastPx="200.60" TrdDt="2005-11-28" BizDt="2005-
        11-28” TrdTyp="3" TrdSubTyp="1">
                        <Instrmt Sym="CAD" CFI="OPXXXX" MMY="20051217"
                                StrkPx="660.00"/>
                        <RptSide Side="1" PosEfct="O" Txt="Position Adjustment">
                                <Pty ID="00123" R="1">
                                        <Sub ID="M" Typ="26"/>
                                </Pty>
                                <Pty ID="MBA" R="38"/>
                        </RptSide>
                        <RptSide Side="2" PosEfct="C">
                                <Pty>
                                        <Sub ID="F" Typ="26"/>
                                </Pty>
                        </RptSide>
                </TrdCaptRpt>
        </Batch>
</FIXML>
```

NOTE: The formatting of the sample messages contained in this document is for display purposes only. Actual FIXML messages are contained on a single line and should not be broken into multiple lines or blocks. Messages formatted on more than one line will not be accepted.

Sample Message - Position Adjustment Futures

```
<FIXML r="20030618" s="20040109" v="4.4" xr="FIA" xv="1.1"
xmlns="http://www.fixprotocol.org/FIXML-4-4">
        <Batch BizDt="2005-11-28" TotMsg="1">
                <TrdCaptRpt LastQty="50" LastPx="200.60" TrdDt="2005-11-28" BizDt="2005-
        11-28" TrdTyp="2" TrdSubTyp="1">
                        <Instrmt Sym="IBM1C" CFI="FXXXXX" MMY="20051217"/>
                        <RptSide Side="1" PosEfct="O" Txt="Position Adjustment">
                                <Pty ID="00123" R="1">
                                        <Sub ID="M" Typ="26"/>
                                </Pty>
                                <Pty ID="MBA" R="38"/>
                        </RptSide>
                        <RptSide Side="2" PosEfct="C">
                                <Pty>
                                        <Sub ID="F" Typ="26"/>
                                </Pty>
                        </RptSide>
                </TrdCaptRpt>
        </Batch>
</FIXML>
```

NOTE: The formatting of the sample messages contained in this document is for display purposes only. Actual FIXML messages are contained on a single line and should not be broken into multiple lines or blocks. Messages formatted on more than one line will not be accepted.

Implementation Considerations

General

Entering Exchange for Physical (EFP) as a Trade Type (TrdTyp=2) is only allowed for Futures transactions.

Transaction ID

In the first line of the message, users must identify the message type in the TrdTyp tag by entering "3"or "2" as the Trade Type. Trade Type "3" indicates that this message refers to a Transfer. To identify Exchange for Physical on the message Trade Type "2" is used. The Trade Sub Type tag (TrdSubTyp) is used to further differentiate between types of transfers. For Position Adjustments, enter a Trade Sub Type of "1" to indicate this message refers to an Internal Transfer as opposed to a Transfer of Account or CMTA Transfer.

Optional Field

The Trade Price for adjustments is an optional field. If it is not needed, then the tag should not be included in the FIXML message.
Note: Trade Updates will only be available for commodity contract (i.e., futures and futures options) that are subject to CFTC jurisdiction.

ENCORE Transmission: Update Trade Request

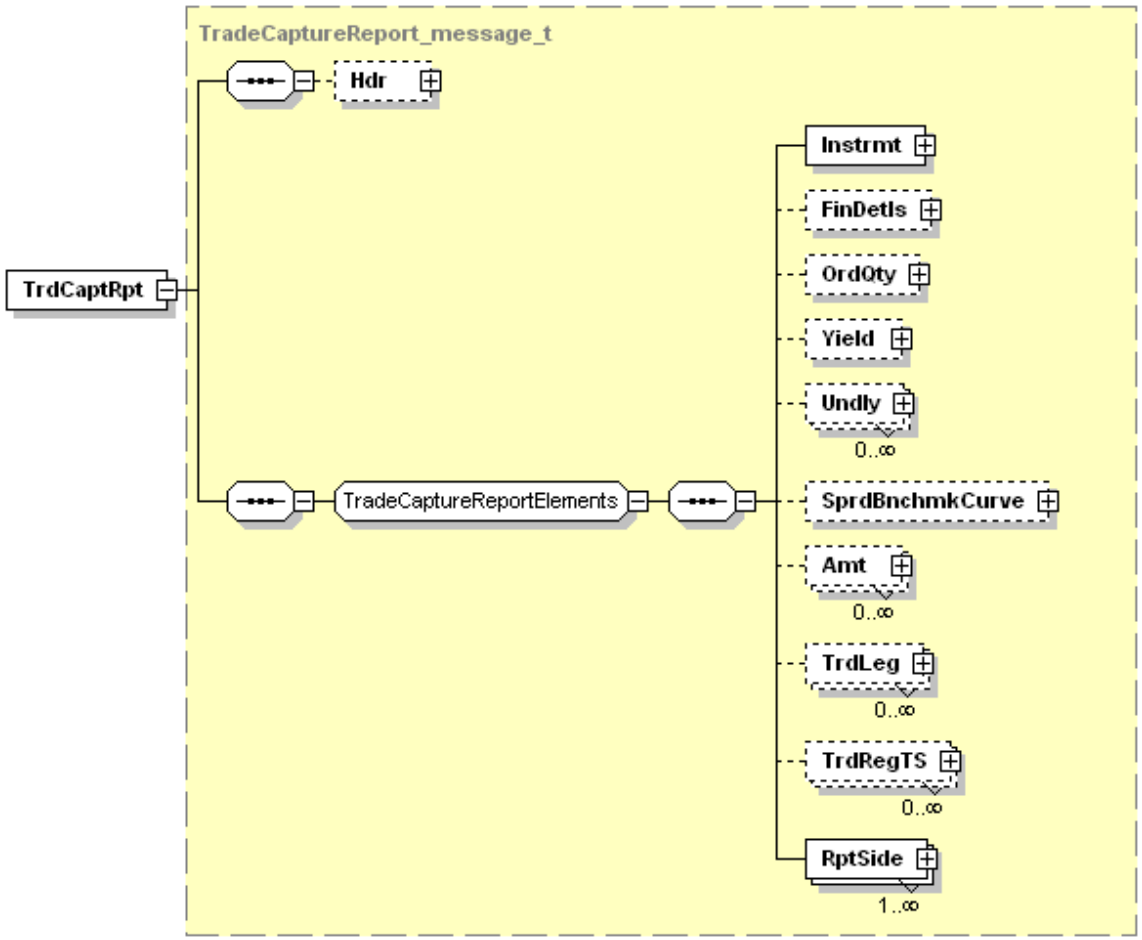
FIX Message: CM to OCC	Trade Capture Report

Overview

OCC provides a trade management system that allows clearing members the ability to update non-critical fields for both options on futures and futures. Firms may use this functionality to edit matched trades which were incorrectly entered or otherwise incomplete. An example of this would be a trade marked for the wrong account or filled without a Give-Up Clearing Member indicated. Non-critical fields such as these may be changed at the clearinghouse. This action causes the trade to be updated on the clearinghouse's books and will generate new cleared trade records that may be used in firm and exchange systems.
The OCC Trade Update system will provide Clearing Members with the ability to update certain non-critical fields on matched trades. Changes may be communicated to OCC through ENCORE or via inbound FIXML messages. All updates will update trades at OCC as well as generate new cleared trade records for firm and exchange systems.
Trade Updates will be available on the Trade Capture Report Message following the execution of a trade. It is possible to update non-critical matching fields on valid top day trades.
Fields available for update include:

- Account Type
- Sub Account
- Open Close code
- Customer Account Number
- Trade Allocation Indicator (futures only)
- Give-up Clearing Firm
- Remarks
- Order ID
- CTI Code (futures only)

Message Structure



Message Layout – Trade Capture Report – Update Trade Request: Futures, Options on Futures and Commodity Options

FIXML Message							Definitions		
FIX Mapping						Data	Data Type	Sample Data	Max Length
Tag #	Report	Comp	Sub Comp	Sub Sub Comp	Field Name				
TrdCaptRpt									
572					RptRefID	Unique Identifier for the Trade. Must match the RptID provided by OCC on the original TrdCaptRpt message.	String	184496521	20
32					LastQty	Quantity	Qty	1	7
31					LastPx	Price (Could be negative for futures only)	Price	93.89	10 (5 for whole part, 5 for decimal part)
487					TransTyp	Trade Report Transaction Type 2 = Replace	Int	2	1
856					RptTyp	Trade Report Type 0 = Submit	Int	0	1
715					BizDt	Clearing Business Date	LocalMktDate	2006-12-04	10 (YYYY-MM-DD)
75					TrdDt	As Of Date	LocalMktDate	2006-12-04	10 (YYYY-MM-DD)
	➔	Instrmt							
55					Sym	Symbol	String	AAPL	6
461					CFI	CHAR 1: O for Option, F for Futures CHAR 2: C for Call, P for Put	String	OCXXXX	6
200					MMY	Series/Contract Year, Month, Date	MonthYear	20070114	8 (4 for year, 2 for month, 2 for day)
202					StrkPx	Strike Price (Decimal Format only) - (options only)	Price		14 (5 for the strike whole, 9 for the strike decimal)
	➔	/Instrmt							
	➔	RptSide							

FIXML Message							Definitions		
FIX Mapping						Data	Data Type	Sample Data	Max Length
Tag #	Report	Comp	Sub Comp	Sub Sub Comp	Field Name				
54					Side	1 = Buy 2 = Sell	Char	2	1
77					PosEfct	Open Close Code O = Open C = Close	Char	O	1
58					Txt	Remarks	String	UPDATE	16
11					ClOrdID	Order Id	String	98765	20
826					AllocInd	Trade Allocation Indicator 3 = Allocation Give Up Executor (Can only be changed from null to 3 on update requests) (futures only)	Int		1
582					CustCpcty	CTI Code (futures only)	Char	1	1
	→	→	Pty						
448					ID	Clearing Member Number	String	00123	5
452					R	Party Role 1 = Executing Clearing Firm	Int	1	3
	→	→	→	Sub					
523					ID	Account Type (C/F/M)	String	M	1
803					Typ	26 = Position Account Type	Int	26	3
	→	→	→	/Sub					
	→	→	/Pty						
	→	→	Pty						
448					ID	Sub Account	String	XYZ	4
452					R	Party Role 38 = Position Account	Int	38	3
	→	→	/Pty						
	→	→	Pty						
448					ID	Give Up Clearing Member Number	String		5
452					R	Party Role	Int	14	3

FIXML Message							Definitions		
FIX Mapping						Data	Data Type	Sample Data	Max Length
Tag #	Report	Comp	Sub Comp	Sub Sub Comp	Field Name				
						14 = Give Up Clearing Firm			
	➔	➔	/Pty						
	➔	➔	Pty						
448					ID	Customer Account Number	String	AB3	10
452					R	Party Role 24 = Customer Account Number	Int	24	3
	➔	➔	/Pty						
	➔	/RptSide							
/TrdCaptRpt									

Sample Message – Update Trade Request – Futures

```
<FIXML r="20030618" s="20040109" v="4.4" xr="FIA" xv="1.1"
xmlns="http://www.fixprotocol.org/FIXML-4-4">
        <Batch BizDt="2009-02-20" TotMsg="1" >
                <TrdCaptRpt RptRefID="123456789" LastQty="50" LastPx="125.40"
                TrdDt="2009-02-20" TransTyp="2" RptTyp="0" BizDt="2009-02-20">
                        <Instrmt Sym="YI" CFI="FFXXXX" MMY="20090415" />
                        <RptSide Side="1" PosEfct="C" Txt="abcdefg" ClOrdId="0AAA003-
                        20060720" AllocInd="3" CustCpcty="1">
                                <Pty ID="00608" R="1">
                                        <Sub ID="M" Typ="26"/>
                                </Pty>
                                <Pty ID="ABC" R="38">
                                </Pty>
                                <Pty ID="00792" R="14">
                                </Pty>
                                <Pty ID="df6312" R=" 24">
                                </Pty>
                        </RptSide>
                </TrdCaptRpt>
        </Batch>
</FIXML>
```

NOTE: The formatting of the sample messages contained in this document is for display purposes only. Actual FIXML messages are contained on a single line and should not be broken into multiple lines or blocks. Messages formatted on more than one line will not be accepted.

Sample Message – Update Trade Request – Options

```
<FIXML r="20030618" s="20040109" v="4.4" xr="FIA" xv="1.1"
xmlns="http://www.fixprotocol.org/FIXML-4-4">
        <Batch BizDt="2009-02-20" TotMsg="1" >
                <TrdCaptRpt RptRefID="123456789" LastQty="50" LastPx="125.40"
                TrdDt="2009-02-20" TransTyp="2" RptTyp="0" BizDt="2009-02-20">
                        <Instrmt Sym="IBM" CFI="OPXXXX" MMY="20110716"
                StrkPx="825" />
                        <RptSide Side="1" PosEfct="C" Txt="abcdefg" ClOrdId="0AAA003-
                        20060720">
                                <Pty ID="00608" R="1">
                                        <Sub ID="M" Typ="26"/>
                                </Pty>
                                <Pty ID="ABC" R="38">
                                </Pty>
                                <Pty ID="00792" R="14">
                                </Pty>
                                <Pty ID="df6312" R=" 24">
                                </Pty>
                        </RptSide>
                </TrdCaptRpt>
        </Batch>
```

NOTE: The formatting of the sample messages contained in this document is for display purposes only. Actual FIXML messages are contained on a single line and should not be broken into multiple lines or blocks. Messages formatted on more than one line will not be accepted.

Implementation Considerations

General

When submitting inbound Trade Update Requests, the Report Reference ID (RptRefID) must match the Report ID (RptID) on the original cleared trade record.
If a field in the inbound record layout is required and not editable, then the submitted data must match the current version of the trade in OCC's systems. If it does not, then the update request will be rejected.
If a field in the inbound record layout is not required, then it does not need to be included on the update request. Clearing members may submit data for these elements and the OCC will use the data provided when processing the change request.
If a field in the inbound record layout is editable, then OCC will attempt to modify the referenced trade using the data provided on the update request. Trade updates may be rejected if the data provided is not valid.
If a field in the inbound record layout is nullable, then the clearing member may request that OCC null that element on the trade by not providing the element.
All data in the inbound record must fully represent how the Clearing Member wants the record to be held.

RptID **(RptRefID)** – unique identifier for the trade – Updated trade messages will repeat the original trade RptId. Inbound Trade Updates will contain a RptRefID that will match the original trade RptId.

TransTyp – **0** (New), **1** (Canceled), **2** (Replace)

** A value of 2 (Replace) is only valid for Inbound Update Trade Capture Report Messages.

RptTyp – **0** (Submit), **3** (Reject), **4** (Update)

**A value of 0 (Submit) is only valid for Inbound Update Trade Capture Report Messages

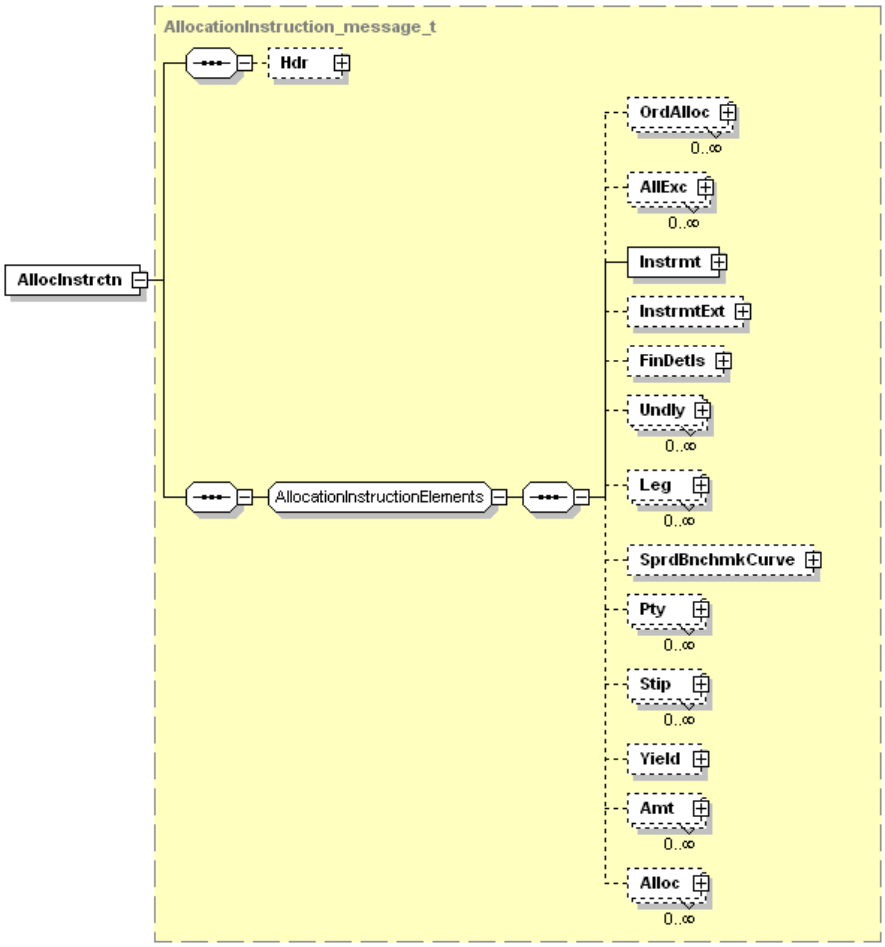
ENCORE Transmission: Futures Allocation Instruction

FIX Message: CM to OCC (New)	Futures Allocation Instruction

Overview

The Futures Allocation transmission extends to futures and options on futures products. Following the execution of a trade, the exchange relays a matched trade record to OCC and positions are updated for the buy and sell side clearing firms. If the trade was executed for an account other than the Executing Clearing Member (and it was not originally indicated on the trade), then the holder may enter a post trade allocation (give-up) in order to transfer that position to the correct clearing account.
The Executing/Originating Clearing Member inputs the allocation, which transfers the position with premium/variation to the give-up/contra Clearing Member's account. Allocations require that the Give-Up CM accept (or Claim) the position. This can be done explicitly through a claim or implicitly by registering an allocation agreement.
The Executing member will have two methods for providing allocation instructions, on-line or via FIXML message. This section details the process for submitting allocations to OCC via inbound FIXML. With inbound FIXML, Allocations will be sent in the Allocation Instruction FIXML message.

Message Structure



Message Layout – Allocation Instruction – Futures/Options on Futures

FIXML Message							Definitions		
Tag #	Report	Comp	Sub Comp	Sub Sub Comp	Field Name	Data	Data Type	Sample Data	Max Length
	AllocInstrctn								
70					ID	Unique Identifier for Allocation Instruction Msg	String	48578394	20
71					TransTyp	Allocation Transaction Type 0 = New	Int	0	1
626					Typ	Specifies purpose of Allocation Instruction Message 2 = Preliminary	Int		1
53					Qty	Total Quantity	Qty	2200	7
75					TrdDt	As Of Date	LocalMkt Date	20060516	10
828					TrdTyp	Trade Type 0 = Regular Trade 1 = Block Trade 2 = EFP	Int	0	1
54					Side	1 = Buy 2 = Sell (Originator)	Int	1	1
442					MLegRptTyp	Spread Indicator 1 = Outright Non-Spread Trade 2 = Individual Leg of a Multi-Leg Trade	Char	1	1
715					BizDt	Clearing Business Date	LocalMkt Date	2006-05-16	10
6					AvgPx	Transaction Price (Could be negative for futures only)	Price	2.70	10 (5 for whole part, 5 for decimal part)
819					AvgPxInd	Average Pricing Indicator 0 = No Average Pricing	Char	0	1
58					Txt	Originator Remarks	String		25

FIXML Message							Definitions		
Tag #	Report	Comp	Sub Comp	Sub Sub Comp	Field Name	Data	Data Type	Sample Data	Max Length
77					PosEfct	Open/Close Code (Originator) O = Open C = Close	String	C	1
	➔	OrdAlloc							
11					ClOrdID	Order ID	String	FG654321854 FDFGHTY	20
	➔	/OrdAlloc							
	➔	AllExc	**Note**: AllExc block is repeated for each Trade ID associated to the Allocation						
1003					TrdID	Trade ID that was assigned by exchange	String	B12345678TY UIOP	20
1041	**Note**: Omit this field for grouped allocation processing.				FirmTrdID	Firm Trade ID that was assigned by firm	String	ASDF1234HJK L789	15
	➔	/AllExc							
	➔	Instrmt							
55					Sym	Symbol	String	VX	6
461					CFI	Default Values	String	FXXXXX	6
200					MMY	Series/Contract Year, Month, Date	MonthYear	20060514	8 (4 for year, 2 for month, 2 for day)
202					StrkPx	Strike Price (decimal format) (Options on Futures only)	Price	80.00	14 (5 for the strike whole, 9 for the strike decimal)
	➔	/Instrmt							
	➔	Pty							
448					ID	Clearing Member Number	String	00551	5
452					R	Party Role 1 = Executing Clearing Firm	Int	1	3
	➔	➔	Sub						
523					ID	Account Type	String	C	1
803					Typ	Party Type 26 = Position Account Type	Int	26	3
	➔	➔	/Sub						
	➔	/Pty							

FIXML Message							Definitions		
Tag #	Report	Comp	Sub Comp	Sub Sub Comp	Field Name	Data	Data Type	Sample Data	Max Length
	➔	Pty							
448					ID	Account ID (Sub-Account)	String	KTZ	15
452					R	Party Role 38 = Position Account	Int	38	3
	➔	/Pty							
	➔	Pty							
448					ID	Executing Broker	String	811F	10
452					R	Party Role 2 = Executing Broker	Int	2	3
	➔	/Pty							
	➔	Pty							
448					ID	Account Number	String	ABC123	10
452					R	Party Role 24 = Customer Account	Int	24	2
	➔	/Pty							
	➔	Alloc	**Note**: Allocation Group is repeated for each Give-up. Quantity from all Give-ups must sum to Total Quantity.						
80					Qty	Quantity Allocated to Give-Up Firm	Qty	1000	7
	➔	➔	Pty						
448					ID	Clearing Member Number	String	00123	5
452					R	Party Role 18 = ContraClearingFirm	Int	18	3
	➔	➔	/Pty						
	➔	➔	➔	Sub					
523					ID	Account Type (C/F/M)	String	M	1
803					Typ	26 = Position Account Type	Int	26	3
	➔	➔	➔	/Sub					
	➔	➔	Pty						
448					ID	Sub Account ID	String	KTZ	15
452					R	Party Role 38 = Position Account	Int	38	3
	➔	➔	/Pty						
	➔	➔	Pty						

FIXML Message							Definitions		
Tag #	Report	Comp	Sub Comp	Sub Sub Comp	Field Name	Data	Data Type	Sample Data	Max Length
448					ID	Account Number	String	1234	10
452					R	Party Role 24 = Customer Account	Int	24	3
	➔	➔	/Pty						
	➔	➔	MiscFee						
137					MiscFeeAmt	Misc. Fee Amt	Amt	1.30	8 (4 for whole part, 4 for decimal part)
139					MiscFeeType	Indicates type of misc. fee 11 = Conversion (Cash Residual Amount)	Int	11	2
	➔	➔	/MiscFee						
	➔	➔	MiscFee						
137					MiscFeeAmt	Misc. Fee Amt	Amt	15.00	8 (4 for whole part, 4 for decimal part)
139					MiscFeeType	Indicates type of misc. fee 7 = Other (Additional Amount)	Int	7	1
	➔	➔	/MiscFee						
	➔	/Alloc							
	/AllocInstrctn								

Sample Messages – Futures Allocation

Option on Future Allocation – Single Trade/Give-up

```
<AllocInstrctn ID="123456" TransTyp="0" Typ="2" Qty="230" TrdDt="2005-11-28" TrdTyp="0"
AvgPx="1.48" AvgPxInd="0" Txt="Allocation OOF" PosEfct="O" Side="1" MLegRptTyp=”1”>
        <OrdAlloc ClOrdID=”00072113669131000414”/>
        <AllExc TrdID=”1321DFS654” FirmTrdID=”987654sdf6”/>
        <Instrmt Sym="YI" CFI="OPXXXX" MMY="20131029" StrkPx="40.00"/>
        <Pty ID="00123" R="1">
                <Sub ID="C" Typ="26"/>
        </Pty>
        <Pty ID="ABCD" R="24"/>
        <Alloc>
                <Pty ID="00456" R="18">
                        <Sub ID="F" Typ="26"/>
                </Pty>
                <Pty ID="1234" R="24"/>
                <MiscFees Typ="7" Amt="12.50"/>
        </Alloc>
</AllocInstrctn>
```

Futures Allocation - Single Trade/Give-up

```
<AllocInstrctn ID="123456" TransTyp="0" Typ="2" Qty="230" TrdDt="2005-11-28" TrdTyp="2"
AvgPx="101.95" AvgPxInd="0" Txt="Allocation Future" PosEfct="O" Side="1"" MLegRptTyp=”1”>
        <OrdAlloc ClOrdID=”32145613”/>
        <AllExc TrdID=”1321DFS654” FirmTrdID=”987654sdf6”/>
<Instrmt Sym="YI" CFI="FXXXXX" MMY="20131224"/>
        <Pty ID="00123" R="1">
                <Sub ID="M" Typ="26"/>
        </Pty>
        <Pty ID="MBA" R="38"/>
                <Pty ID="ABCD" R="24"/>
        <Alloc>
                <Pty ID="00456" R="18">
                        <Sub ID="M" Typ="26"/>
                </Pty>
                <Pty ID="MBB" R="38"/>
                <Pty ID="1234" R="24"/>
        <MiscFees Typ="7" Amt="15.00"/></Alloc>
</AllocInstrctn>
```

Futures Allocation – Multiple Trades/Multiple Give-ups

```
<AllocInstrctn ID="111123" TransTyp="0" Typ="2" Qty="8" TrdDt="2013-08-01" TrdTyp="2"
AvgPx="1319.4000" AvgPxInd="0"  Txt="Allocation Future" PosEfct="O" Side="1" MLegRptTyp="1">

        <OrdAlloc ClOrdID="00072081783327348610"/>
```

```
        <AllExc TrdID="311583403B "/>
        <AllExc TrdID="311583409S"/>
<Instrmt Sym="YG" CFI="FXXXXX" MMY="20131227" StrkPx=""/>

        <Pty ID="00035" R="1">
                <Sub ID="F" Typ="26"/>
        </Pty>
        <Pty ID="ABCD" R="24"/>
        <Alloc Qty="5">
                <Pty ID="00140" R="18">
                        <Sub ID="C" Typ="26"/>
                </Pty>
                <MiscFees Typ="11" Amt="0.45"/>
        </Alloc>
        <Alloc Qty="3">
                <Pty ID="00535" R="18">
                        <Sub ID="C" Typ="26"/>
                </Pty>
                <MiscFees Typ="11" Amt="0.65"/>
                <MiscFees Typ="7" Amt="6.00"/>
        </Alloc>
</AllocInstrctn>
```

NOTE: The formatting of the sample messages contained in this document is for display purposes only. Actual FIXML messages are contained on a single line and should not be broken into multiple lines or blocks. Messages formatted on more than one line will not be accepted.

Implementation Considerations

General

Within the FIXML Message format, Trade Price (AvgPx) must be entered. Trade Price must be entered in dollars and cents and only one AvgPx tag can be included in the message.
Note: PosEfct and Buy/Sell Codes are only supplied for the originator. The Contra side will be the opposite of the Originator (i.e. If the Originator is an Opening Buy then the Contra is a Closing Sell). MiscFee is included in the Alloc Block, however only one MiscFee should be supplied. It is written as the Additional Amount.

Transaction ID

In the first line of the message, users must identify the message type in the TransTyp tag by entering "0". This indicates the record is a new allocation. Entering the TrdTyp tag further differentiates the type of trade being allocated. Regular Trade is represented as "0", Block Trade is "1", and Exchange for Physical Trade which is used by Futures is "2".

Options on Futures

The MMY tag needs to include the Series Contract Date, not the Expiration Date. For example, the June 2010 option on futures expires in May. The Expiration Date is 5/25/2010 but the Contract Series date is 6/28/2010.

Multiple Trades

A single allocation may be initiated from multiple trades. Users may optionally identify multiple Trade IDs for an allocation by repeating the AllExc block for each Trade ID. If this method is used, OCC will verify that all trades respective to the Trade IDs included on the message:

- Exist for the current business day.
- Share the same executor account information: Clearing Member Number, Account Type and Sub-Account.
- Share the same contract/series: Symbol, Series/Contract Date, Strike Price.
- Share the same open/close code.
- Share the same buy/sell code.

OCC will reject an allocation containing multiple Trade IDs if these criteria are not met.

Multiple Give-Ups

An allocation may be entered for the purpose of allocating a position to multiple Give-Up firms. Users may identify multiple Give-Up firms for a single allocation by repeating the Alloc block for each Give-Up. For each Give-Up identified, the user is required to include the quantity being allocated to that Give-Up. Additionally, the user may choose to optionally include a customer ID, cash residual amount and/or a miscellaneous fee amount. If multiple Give-Ups are identified in an allocation, the individual Give-Up quantities must sum to the Total Quantity field.

When an allocation message with multiple give-up firms passes validation, the allocation results in multiple allocation post trades. A post trade allocation DDS message for each post trade is created and sent to the executing/originating firm and to each give-up firm identified on the submission.

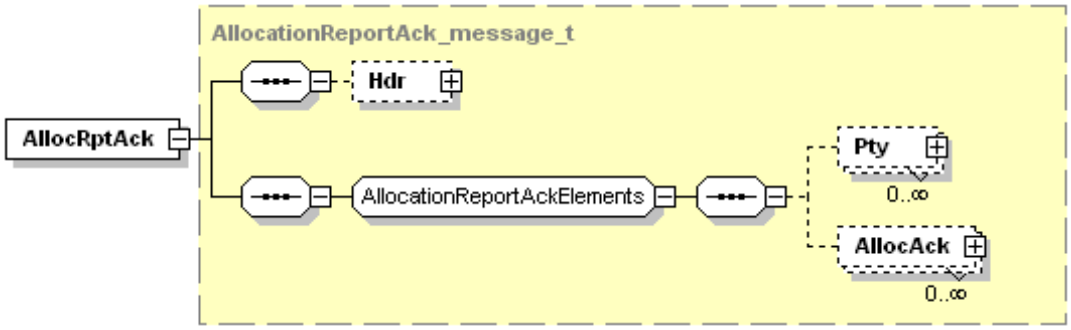
ENCORE Transmission: Futures Allocation Report Acknowledgement

FIX Message: CM to OCC (New)	Allocation Report Acknowledgement

Overview

The Futures Allocation Report Acknowledgement transmission extends to CFTC regulated futures, commodity options and options on futures products.
Once the Executing/ Originating Clearing Member has input a valid allocation, a FIXML notification (Allocation Report) will be sent to the Give-Up firm alerting them that an allocation was submitted.
In the Allocation Report message from OCC, if the Stat="3", then the allocation is unclaimed and requires the carry firm to accept or reject the allocation. Carry firms may declare their intention to accept or reject allocations through a FIXML message or ENCORE.
The Allocation Report Acknowledgement message is the FIXML message used by a give-up clearing member to indicate to OCC whether they would like to claim or reject the unclaimed allocation. This message must specifically reference the unclaimed Allocation Report message OCC produced by citing the ID from the original message.
Once OCC processes the claim or reject message, a completed Allocation Report message is sent to the executing and give-up sides stating whether the allocation was claimed or rejected.

Message Structure



Message Layout – Allocation Report Acknowledgement – Futures and Options on Futures Claim or Reject

FIXML Message							Definitions		
Tag #	Report	Comp	Sub Comp	Sub Sub Comp	Field Name	Data	Data Type	Sample Data	Max Length
	AllocRptAck								
755					RptID	Unique Identifier for Allocation msg. (ID for this claim/reject message).	String	56328125	20
70					ID	Unique Identifier for Allocation Message, (must match the ID from OCC unclaimed allocation notification msg.).	String	48578394	20
71					TransTyp	Allocation Transaction Type 0 = New	Int	0	1
794					RptTyp	Specifies type or purpose of Allocation transaction 9 = Accept 10 = Reject	Int	9	794
715					BizDt	Clearing Business Date	LocalMkt Date	2006-05-11	10
53					Qty	Quantity (Total) Must match the total quantity of the allocation.	Qty	150	7
	➔	AllocAck	**Note:** The AllocAck block is always used to refer to the give-up clearing member who is receiving the position or trade. In the AllocRptAck the give-up clearing member is the only party referenced, the originator need not be mentioned. The Clearing Member # stated when R = 18 must match the # shown on the unclaimed AllocRpt message from OCC. All of the other give-up clearing member info (Acct Type, Acct ID, Acct #) may be different. OCC will update the position movement and process using the information provided in the claim message.						
1047					AllocPos Efct	Open/Close Code (Contra) O = Open C = Close	String	C	1
161					Txt	Contra Remarks	String		25
	➔	➔	Pty						
448					ID	Clearing Member Number	String	00238	5

FIXML Message							Definitions		
Tag #	Report	Comp	Sub Comp	Sub Sub Comp	Field Name	Data	Data Type	Sample Data	Max Length
452					R	Party Role 18 = Contra Clearing Firm	Int	18	3
	→	→	→	Sub					
523					ID	Account Type	String	F	1
803					Typ	26 = Position Account Type	Int	26	3
	→	→	→	/Sub					
	→	→	/Pty						
	→	→	Pty						
448					ID	Sub Account ID	String	KTZ	5
452					R	Party Role 38 = Position Account	Int	38	3
	→	→	/Pty						
	→	→	Pty						
448					ID	Account Number	String	123ABC	5
452					R	Party Role 24 = Customer Account	Int	24	3
	→	→	/Pty						
	→	/AllocAck							
	/AllocRptAck								

Sample Message – Future Allocation Acknowledgement Claim

```
<FIXML r="20030618" s="20040109" v="4.4" xr="FIA" xv="1.1"
xmlns="http://www.fixprotocol.org/FIXML-4-4">
        <AllocRptAck RptID="123456" ID="2222226" TransTyp="0" RptTyp="9" BizDt="2014-02-19"
        Qty="100">
                <AllocAck AllocPosEfct="O" Txt="Allocation Ack Claim">
                        <Pty ID="00456" R="18">
                                <Sub ID="M" Typ="26"/>
                        </Pty>
                        <Pty ID="MBB" R="38"/>
                        <Pty ID="1234" R="24"/>
                        </AllocAck>
        </AllocRptAck>
</FIXML>
```

NOTE: The formatting of the sample messages contained in this document is for display purposes only. Actual FIXML messages are contained on a single line and should not be broken into multiple lines or blocks. Messages formatted on more than one line will not be accepted.

Sample Message – Future Allocation Acknowledgement Reject

```
<FIXML r="20030618" s="20040109" v="4.4" xr="FIA" xv="1.1"
xmlns="http://www.fixprotocol.org/FIXML-4-4">
        <Batch BizDt="2006-05-16" TotMsg="1" >
                <AllocRptAck RptID="123456" ID="222222" TransTyp="0" RptTyp="10" Qty="100">
                <AllocAck AllocPosEfct="O" Txt="Allocation Ack Claim">
                        <Pty ID="00456" R="18">
                                <Sub ID="M" Typ="26"/>
                        </Pty>
                        <Pty ID="MBB" R="38"/>
                        <Pty ID="1234" R="24"/>
                        </AllocAck>
        </AllocRptAck>
        </Batch>
</FIXML>
```

NOTE: The formatting of the sample messages contained in this document is for display purposes only. Actual FIXML messages are contained on a single line and should not be broken into multiple lines or blocks. Messages formatted on more than one line will not be accepted.

Implementation Considerations

General

Within the AllocRptAck message, AllocID (ID) must be entered. ID must match the ID sent on the unclaimed Allocation notification message (AllocRpt with Stat="3").
The Quantity on the AllocRptAck must be equal to the Qty on the Position Movement in ENCORE. If these two values do not match, OCC will reject the AllocRptAck and return an invalid allocation message.

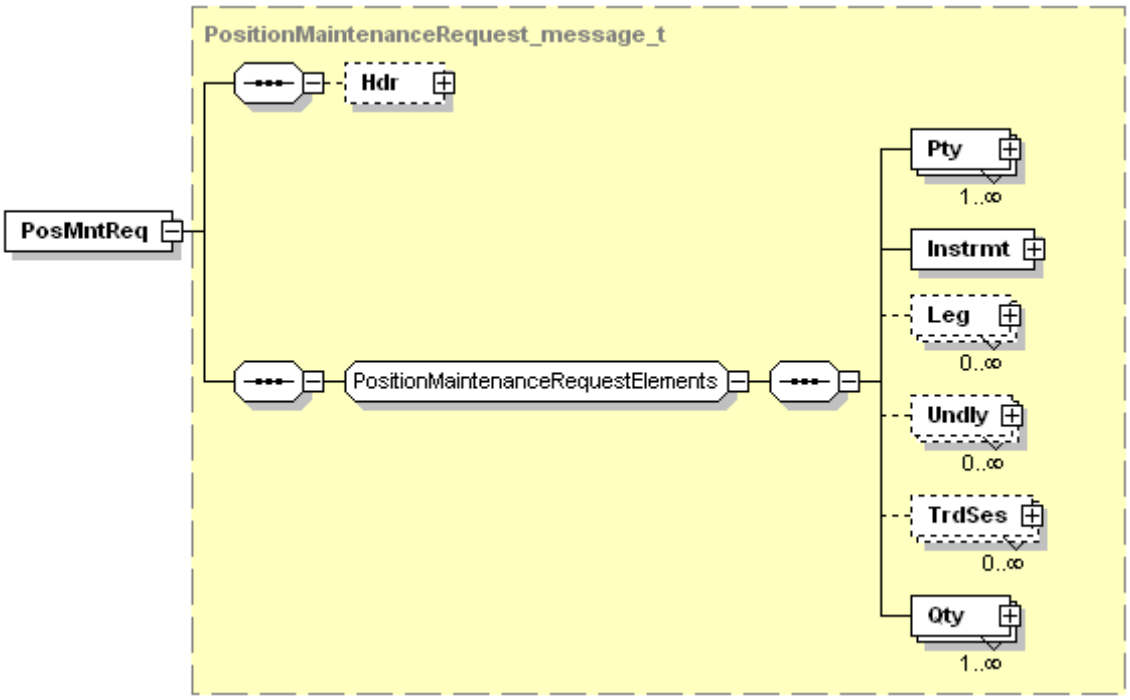
ENCORE Transmission: Holding Submissions

FIX Message: CM to OCC	Position Maintenance Request

Overview

Holding Submissions allow Clearing Members to submit instructions to adjust their long holdings in the Encore Futures Delivery system. Holding Submissions are valid for futures.

Message Structure



Message Layout – Position Maintenance Request - Holding Submission

FIXML Message							Definitions		
Tag #	Report	Comp	Sub Comp	Sub Sub Comp	Field Name	Data	Data Type	Sample Data	Max Length
	PosMntReq								
710					ReqID	Request ID	String	1654812	20
709					TxnTyp	8 = Long Holding	Int	8	1
715					BizDt	Business Date	LocalMkt Date	2010-01-13	10
712					Actn	1 = New	Int	1	1
58					Txt	Optional Data	String		25
	➔	Pty							
448					ID	Clearing Member Number	String	00123	5
452					R	Party Role 4 = Clearing Firm	Int	4	3
	➔	➔	Sub						
523					ID	Account Type (C/F/M)	String	C	1
803					Typ	Position Account Type	Int	26	3
	➔	➔	/Sub						
	➔	/Pty							
	➔	Pty							
448					ID	Sub Account ID	String		1
452					R	Party Role 38 = Position Account	Int	38	3
	➔	/Pty							
	➔	Instrmnt							
55					Sym	Future Symbol	String	ZBE	6
461					CFI	CHAR1; F for Future	String	FXXXXX	6
200					MMY	Series/Contract Year, Month, Date	MonthYear	20061214	8 (4 for year, 2 for month, 2 for day)
	➔	/Instrmt							
	➔	Qty							

FIXML Message							Definitions		
Tag #	**Report**	**Comp**	**Sub Comp**	**Sub Sub Comp**	**Field Name**	**Data**	**Data Type**	**Sample Data**	**Max Length**
703					Typ	TQ = Transaction Qty	String	TQ	6
704					Long	Long Quantity	Int	150	7
976					QtyDt	Trade Date for Holding	LocalMkt Date	2009-11-20	10
	➔	/Qty							
	/Pos MntReq								

Sample Message – Holding Submission

```
<FIXML r="20030618" s="20040109" v="4.4" xr="FIA" xv="1.1"
xmlns="http://www.fixprotocol.org/FIXML-4-4">
        <Batch BizDt="2010-03-13" TotMsg="1">
                <PosMntReq ReqID=”1654812” TxnTyp="8" Actn="1" BizDt="2010-03-13">
                        <Pty ID="00123" R="4">
                                <Sub ID="C" Typ="26" />
                        </Pty>
                        <Instrmt Sym="ZBE" CFI="FXXXXX" MMY="20100322" />
                                <Qty Typ="TQ" Long="150" QtyDt=”2009-11-26”/>
                </PosMntReq>
        </Batch>
</FIXML>
```

NOTE: The formatting of the sample messages contained in this document is for display purposes only. Actual FIXML messages are contained on a single line and should not be broken into multiple lines or blocks. Messages formatted on more than one line will not be accepted.

Implementation Considerations

If OCC already has a Holding record for the provided account, product, and trade date, then the existing Quantity will be modified to be the supplied value.
If OCC does not already have a Holding record for the provided account, product, and trade date, then a Holding will be created with the supplied quantity.
If a Holding has been closed out, the Clearing Member may submit a Holding Qty of 0 (zero) to delete the Holding from the OCC system.
Clearing Members that wish to send OCC a snapshot of their holdings each day via FIXML should contact their OCC Member Service Representative in order to stop the automatic rollover of holdings within ENCORE.
If OCC is unable to process the Holding or if the transaction is rejected for any reason, then OCC will produce a Rejected Holdings Submission DDS message. Clearing Members should consult the Outbound DDS Proprietary Reference Guide for the details of the reject message.

ENCORE Transmission: Batch Header Record

Overview

The Transmission Header contains tags for the process date and the total record count. This header is required to allow for Straight Through Processing (STP) on all Inbound FIXML messages included in a batch.
Users must include a header record as it is required for straight through processing.

Message Layout – Batch Header Record

FIXML Message							Definition		
Tag #	Report	Comp	Sub Comp	Sub Sub Comp	Field Name	Data	Data Type	Sample Data	Max Length
	➔	FIXML							
	➔	Batch							
715					BizDt	Business Date	Date	2005-11-28	10
TBD					TotMsg	Total Transaction Messages	String	20	7
	➔	/Batch							
	➔	/FIXML							

Sample Batch Header

```
<FIXML>
    <Batch BizDt="2005-11-28" TotMsg="20" >
    Insert FIXML messages
    </Batch>
</FIXML>
```

Revision History

Version	Date	Version Updates
3.8	9/6/2013	Remove references to "Equity/Index Option Allocations," and identify the current Allocation capability as "Futures Options" only. Update the Futures Allocation Instruction message layout, sample message, and implementation considerations for the following: • System change that allows existing blocks to be repeated (AllExc for trade IDs, Alloc for give-ups). • Add Misc Fee block for 11 = Conversion (Cash Residual Amount). Standardize references to data types as follows for consistency within this document and to agree with industry standards: • Change references to data type "Integer" to "Int". • Change references to data type "Quantity" to "Qty". • Change references to data type "Amount" to "Amt". Add Appendix - Revision History.
3.9	9/27/2013	Update message layout table and sample messages for Trade Capture Report –Transfer of Account.
3.10	3/11/2014	Minor corrections to the Allocation Report Acknowledgement message layout and sample messages. Add note to Implementation Considerations regarding truncating optional fields.
3.11	10/6/2014	Update CMTA Transfer implementation considerations and sample messages to include Customer ID (Pty block with R=24), which is now required. Update logo on cover page.
3.12	12/12/2014	Remove outdated information about truncating optional fields from the Implementation Considerations section.
3.13	4/16/2015	Add NFX to Exchange Codes listing. Update OCC Web site URL for schemas.
3.14	9/2/2015	Add EDGX to Exchange Codes listing.
3.15	12/15/2015	Add MCRY to Exchange Codes listing.
3.16	4/14/2016	Corrected Trade ID field length for Allocation Instruction – Futures/Options on Futures layout.
3.17	6/1/2016	Add Txt tag to Exercise Notices layout and sample message.
3.18	12/6/2016	Add MPRL to Exchange Codes listing.
3.19	7/15/2017	Update the following message layout tables for futures prices with five-digit decimals: • Allocation Instruction – Futures/Options on Futures • Trade Capture Report –Transfer of Account • Trade Capture Report – Position Adjustment • Trade Capture Report – Update Trade Request: Futures, Options on Futures and Commodity Options
3.20	9/18/2017	Update the following message layout tables for potentially negative futures prices: • Allocation Instruction – Futures/Options on Futures • Trade Capture Report –Transfer of Account • Trade Capture Report – Position Adjustment • Trade Capture Report – Update Trade Request: Futures, Options on Futures and Commodity Options
3.21	10/18/2017	Update the following message layout tables for futures prices with five-digit integers: • Allocation Instruction – Futures/Options on Futures • Trade Capture Report –Transfer of Account • Trade Capture Report – Position Adjustment • Trade Capture Report – Update Trade Request: Futures, Options on Futures and Commodity Options

Version	Date	Version Updates
3.22	3/5/2018	Update Position Maintenance Request – Customer Gross Margin Position file layout and sample messages for: • New CFTC Reportable Account Number tag • New Legal Entity Identifier (LEI) Number tag • Revise Account Name tag description
3.23	6/26/18	Update the following message layout tables for option prices with five-digit integers: • Trade Capture Report – Transfer of Account • Trade Capture Report – CMTA Transfers • Trade Capture Report – Position Adjustment • Trade Capture Report – Update Trade Request: Futures, Options on Futures and Commodity Options Apply branding updates.
3.24	7/11/18	Update Position Maintenance Request – Customer Gross Margin Position file layout: • Change field name from "Account Name" to "LEI Name" • Expand LEI Name field size
3.25	9/19/18	For consistency, update the MMY tag description to indicate "Series/Contract Year, Month, Date" in the following two layouts: • Position Maintenance Request – Customer Gross Margin Position • Position Maintenance Request – Holding Submission
3.26	11/12/18	Add EMLD to Exchange Codes listing.
3.27	2/21/19	Update Allocation Instruction – Futures/Options on Futures file layout to remove references to SLEDS.
3.28	6/26/19	Update Trade Capture Report – CMTA Transfers file layout to clarify valid Option Regulatory Fee Indicator tag value.
3.29	8/30/19	Add SML to Exchange Codes listing.
3.30	9/3/19	Update the following message layout tables for futures and option on futures prices containing up to six integers: • Position Maintenance Request – Exercise Notices • Position Maintenance Request – Do Not Exercise Declaration • Position Maintenance Request – Expiring Exercise Declaration • Position Maintenance Request – Customer Gross Margin Position • Position Maintenance Request - Position Change Submission • Trade Capture Report – Transfer of Account • Trade Capture Report – CMTA Transfers • Trade Capture Report – Position Adjustment • Trade Capture Report – Update Trade Request: Futures, Options on Futures and Commodity Options • Allocation Instruction – Futures/Options on Futures
3.31	9/25/2019	Correct the following message layout tables to remove references to futures from Strike Price Max Length comments. • Position Maintenance Request – Customer Gross Margin Position • Trade Capture Report –Transfer of Account • Trade Capture Report – CMTA Transfers • Trade Capture Report – Position Adjustment • Trade Capture Report – Update Trade Request: Futures, Options on Futures and Commodity Options

Version	Date	Version Updates
3.32	10/16/2019	Update the following message layout tables for futures and option on futures prices to indicate that six-digit price integer expansion is being considered as a future enhancement: • Position Maintenance Request – Exercise Notices • Position Maintenance Request – Do Not Exercise Declaration • Position Maintenance Request – Expiring Exercise Declaration • Position Maintenance Request – Customer Gross Margin Position • Position Maintenance Request - Position Change Submission • Trade Capture Report – Transfer of Account • Trade Capture Report – CMTA Transfers • Trade Capture Report – Position Adjustment • Trade Capture Report – Update Trade Request: Futures, Options on Futures and Commodity Options • Allocation Instruction – Futures/Options on Futures
3.33	11/20/2019	• Update the Sub Account ID field length in Position Maintenance Request - Position Change Submission layout table. • Remove updates related to an enhancement which was being considered which would have expanded price integers to six digits for futures and option on futures.
3.34	6/28/2020	• Revise the www.TheOCC.com website URL to reflect new website organization. • Remove NFX from Exchange Codes listing.
3.35	9/23/2020	Remove ONE from Exchange Codes listing.
3.36	6/1/2023	• Add MEMX to Exchange Codes listing. • Correct location of Side (54) tag in Allocation Instruction – Futures/Options on Futures layout table. • Add minor updates for clarity.
3.37	2/1/2024	• Added MIAX Sapphire exchange.