

ENCORE - Data Distribution Services Guide
Developer Reference
Trade Update Supplement
Version 1.2

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Overview

In the futures marketplace, the clearinghouse provides a trade management system that allows clearing members the ability to update non-critical matching fields. Firms need this ability 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 match 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 the ability to update certain fields on matched trades. Changes may be communicated to OCC through ENCORE or via inbound FIXML messages. All updates will cause trades to be updated 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
- Give-up Clearing Firm
- Remarks
- Order ID
- CTI Code

The OCC accepts Update Trade Request messages from 6:30 a.m. until 7:00 p.m. (CT).

Clearing Members

Clearing Members will have two methods for providing Trade Updates, on-line through ENCORE or via an inbound FIXML message. Once the Clearing Member has input valid changes to non-critical fields on valid top day trades, the corresponding original trade will be updated at OCC. This will cause new messages to be produced and sent to firm and exchange systems.

Following an update, a cancel message (TransTyp = 1) will be created for the details of the trade before the update, and a new add message (TransTyp = 0) will be created for the trade after the update has been applied.

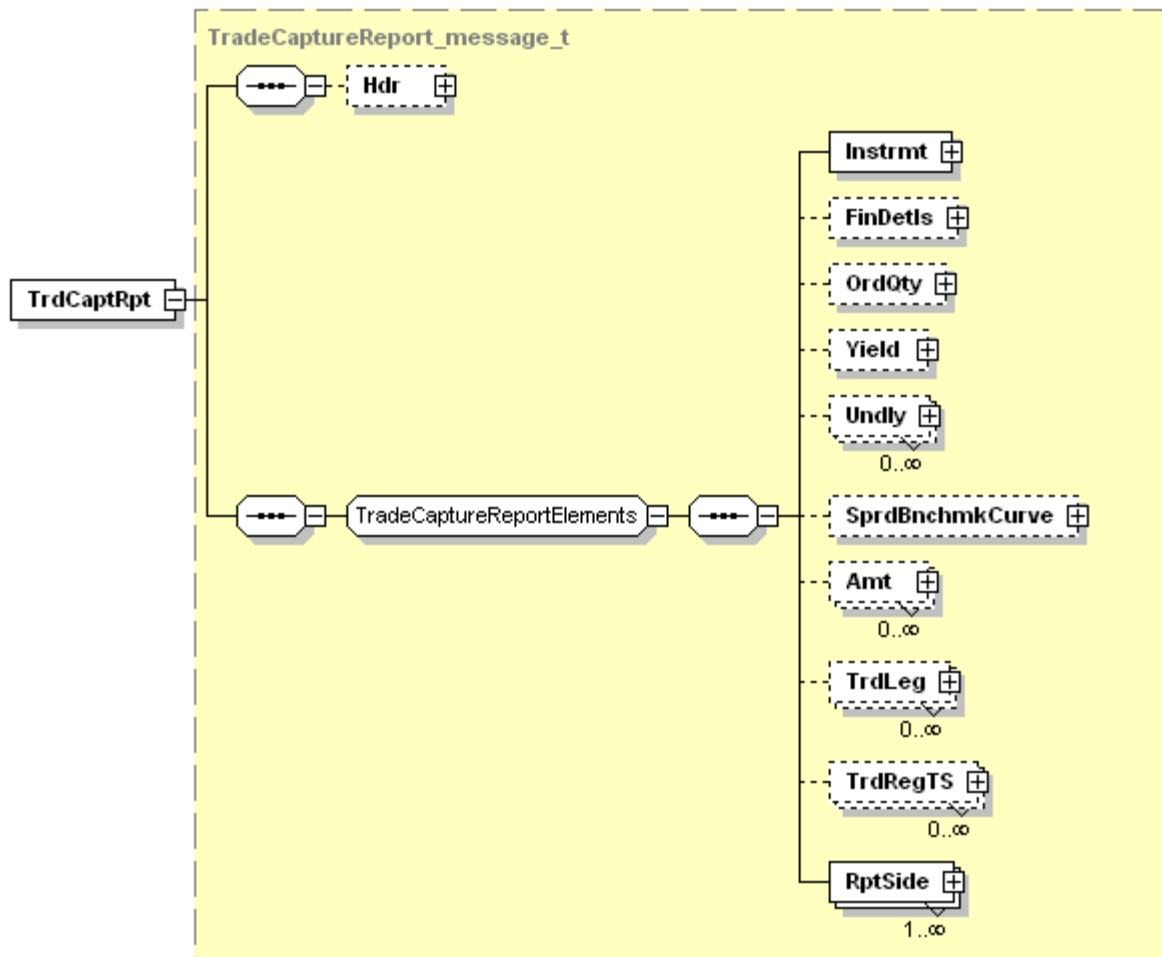
The process of applying updates is similar to current bust and add processing, except messages will have a RptTyp = 4 (update). These notifications will be done according to the recipient's DDS profile.

Clearing Members wishing to update editable fields will only have access to their side of the trade. For example: the buyer to the trade will only be able to update the buy-side fields, and the seller to the trade will only have authority over sell-side information. In the instance that one side of a trade is updated, the contra side Clearing Member will not receive an update message.

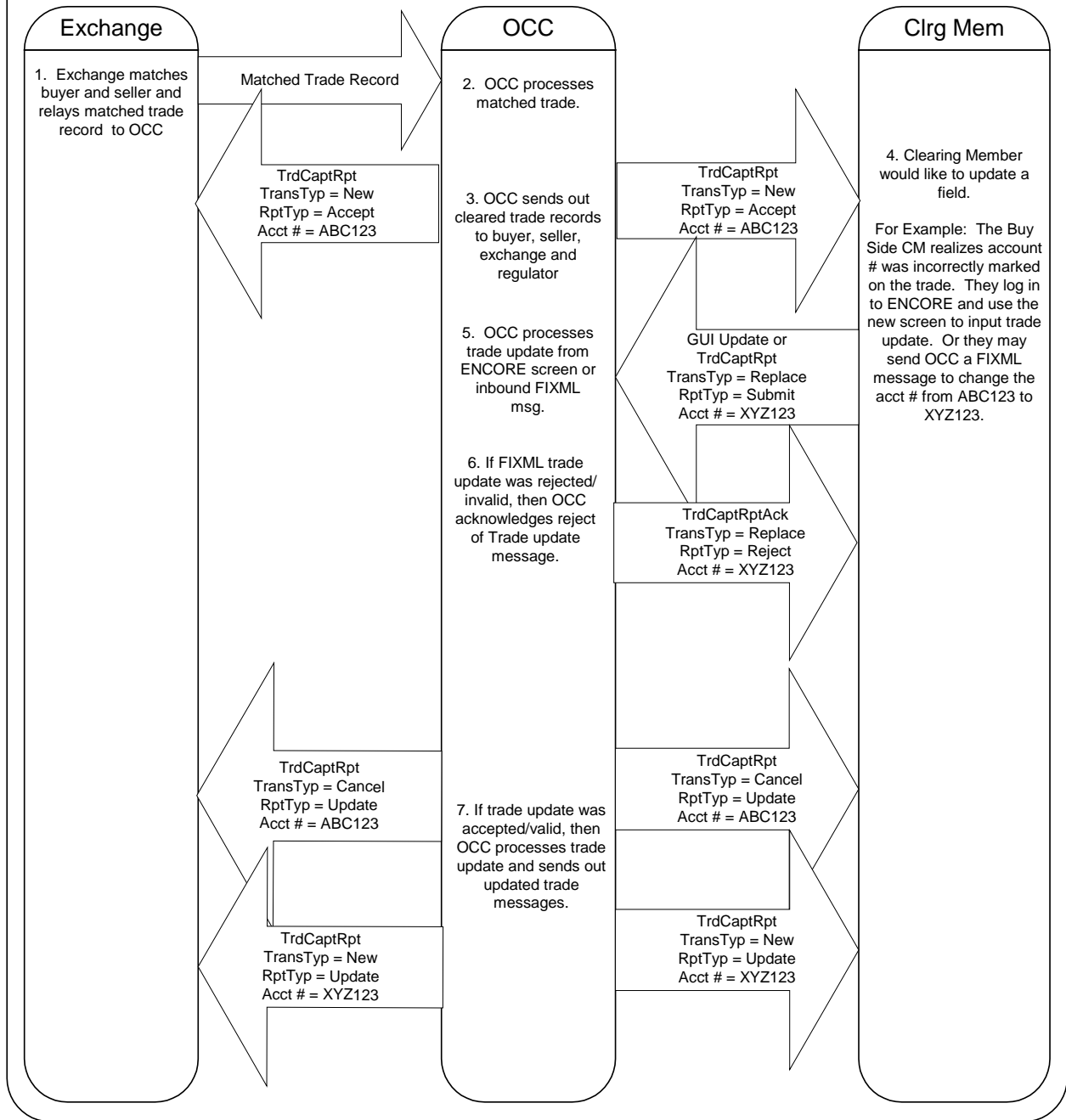
Invalid/Rejected Trade Updates will be reported to the Executing Clearing Member using a Trade Capture Report Acknowledgment (TrdCaptRptAck) message and the original trade will not be affected.

Note: Trade Updates will only be available for commodity contracts (i.e., futures and futures options) that are subject to CFTC jurisdiction.

Message Structure



Messaging Flow for Trade Updates



Message Layout – Trade Capture Report (Inbound Message) – Update Trade Request

Update Trade Request											
FIX Mapping						Data	Data Type	Sample Data	Req.	Edit	Null
Tag #	Report Block	Component Block	Sub Component Block	Sub Sub Component Block	Fields						
TrdCaptRpt											
572					RptRefID	Unique Identifier for the Trade. Must match the RptID provided by OCC on the original TrdCaptRpt message.	String	184496521	Y	N	N
32					LastQty	Quantity	Qty	1	Y	N	N
31					LastPx	Price	Price	93.89	Y	N	N
487					TransTyp	Trade Report Transaction Type 2 = Replace	Int	2	Y	N	N
856					RptTyp	Trade Report Type 0 = Submit	Int	0	Y	N	N
715					BizDt	Clearing Business Date	LocalMktDate	2006-12-04	Y	N	N
75					TrdDt	As Of Date	LocalMktDate	2006-12-04	Y	N	N
	→	Instrmt									
55					Sym	Symbol	String	AAPL1C	Y	N	N
461					CFI	CHAR 1: O for Option, F for Futures CHAR 2: C for Call, P for Put	String	FFSPSX	Y	N	N
200					MMY	Expiration Month, Year, and Day	MonthYear	20061114 (4 for year, 2 for month, 2 for day)	Y	N	N
202					StrkPx	Strike Price (Decimal Format only) options only	Price		Cond	N	N
	→	/Instrmt									
	→	RptSide									

Update Trade Request

Update Trade Request											
FIX Mapping						Data	Data Type	Sample Data	Req.	Edit	Null
Tag #	Report Block	Component Block	Sub Component Block	Sub Sub Component Block	Fields						
54					Side	1 = Buy 2 = Sell	Char	2	Y	N	N
77					PosEfct	Open Close Code O = Open C = Close	Char	O	Y	Y	N
58					Txt	Remarks	String	UPDATE	N	Y	Y
11					ClOrdID	Order Id	String	98765	N	Y	Y
826					AllocInd	Trade Allocation Indicator 3 = Allocation Give Up Executor (Can only be changed from null to 3 on update requests)	Integer		N	Y	Y
582					CustCpcty	CTI Code	Char	1	N	Y	Y
	→	→	Pty								
448					ID	Clearing Member Number	String	00123			
452					R	Party Role 1 = Executing Clearing Firm	Int	1	Y	N	N
	→	→	→	Sub							
523					ID	Account Type (C/F/M)	String	M			
803					Typ	26 = Position Account Type	Int	26	Y	Y	N
	→	→	→	/Sub							
	→	→	/Pty								
			Pty								
448					ID	Sub Account ID	String	XYZ123			
452					R	Party Role 38 = Position Account	Int	38	Cond	Y	Y
			/Pty								
	→	→	Pty								
448					ID	Give Up Clearing Member Number	String		N	Y	Y

Update Trade Request

Update Trade Request											
FIX Mapping						Data	Data Type	Sample Data	Req.	Edit	Null
Tag #	Report Block	Component Block	Sub Component Block	Sub Sub Component Block	Fields						
452					R	Party Role 14 = Give Up Clearing Firm	Int	14			
	→	→	/Pty								
	→	→	Pty								
448					ID	Customer Account Number	String	AB3			
452					R	Party Role 24 = Customer Account Number	Int	24	N	Y	Y
	→	→	/Pty								
	→	/RptSide									
/TrdCaptRpt											

Considerations for Inbound Trade Update Requests:

- 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.

Message Layout - Trade Capture Report (Outbound Message) -Cleared Trade Message (Incl. Updates)

Trade Capture Report – Cleared Trades (Including Updates)								
FIX Mapping						Data	Data Type	Sample Data
Tag #	Report Block	Component Block	Sub Component Block	Sub Sub Component Block	Fields			
	TrdCaptRpt							
571					RptID	Identifier for the Trade (Updated trade messages will repeat original trade RptId)	String	184496521
570					PrevlyRpted	Y/N	Boolean	N
32					LastQty	Quantity	Qty	1
31					LastPx	Premium	Price	93.89
75					TrdDt	As Of Date	LocalMkt Date	2006-12-04
487					TransTyp	Trade Report Transaction Type 0 = New 1 = Cancel	Int	0
856					RptTyp	Trade Report Type 2 = Accept 4 = Update 8 = Defaulted 9 = Invalid CMTA	Int	4
828					TrdTyp	Trade Type 0 = Regular Trade 1 = Block Trade 2 = EFP (futures only)	Int	0
829					TrdSubTyp	Trade Sub Type 0 = CMTA Trade 3 = Reject for Submitting Side 4 = Advisory for Contra Side <i>If not applicable, tag will be dropped.</i>	Int	
880					MtchID	Trade Source CSN	String	0000012

Trade Capture Report – Cleared Trades (Including Updates)								
FIX Mapping						Data	Data Type	Sample Data
Tag #	Report Block	Component Block	Sub Component Block	Sub Sub Component Block	Fields			
715					BizDt	Clearing Business Date	LocalMkt Date	2006-12-04
573					MtchStat	Match Status 0 = Matched 1 = Unmatched	Char	0
	→	Instrmt						
55					Sym	Symbol	String	AAPL1C
48					ID	Ticker Symbol	String	AAPL1C
22					Src	ID Source 8 = Exchange Symbol	String	8
461					CFI	Default Values (refer to CFI Code Default Values section)	String	FFSPSX
200					MMY	Expiration Month and Year	MonthYear	20061114 (4 for year, 2 for month, 2 for day)
541					MatDt	Expiration Date	LocalMkt Date	2007-01-19
202					StrkPx	Strike Price (decimal format, options only)	Price	
CUS T					StrkQt	Strike Price (exchange quoted format, options only)	String	
947					StrkCcy	Strike Currency (options only)	Currency	
967					StrkMult	Strike Multiplier (options only)	Float	
968					StrkValu	Strike Value (options only)	Float	
231					Mult	Multiplier	Float	100
207					Exch	Trade Source (MIC)	Exchange	XOCH
	→	/Instrmt						
	→	Amt						
707					Typ	Amount Type PREM = Premium Amount (options only)	String	

Trade Capture Report – Cleared Trades (Including Updates)

FIX Mapping						Data	Data Type	Sample Data
Tag #	Report Block	Component Block	Sub Component Block	Sub Sub Component Block	Fields			
708					Amt	Extended Premium (options only)	Amt	
	→	/Amt						
	→	RptSide						
54					Side	1 = Buy 2 = Sell	2	2
579					InptDev	Input Device MQ=MQ GUI = ENCORE Entry FXML = FIXML Message RTFX = Real Time FIXML Message	String	GUI
15					Ccy	Premium Currency	Currency	USD
77					PosEfct	Open Close Code O = Open C = Close	Char	O
58					Txt	Remarks	String	UPDATE
11					ClOrdID	Order Id	String	98765
582					CustCpcty	CTI Code	Char	1
TBA					ExchSpecInstr	Exchange Optional Data	String	123XYZ
826					AllocInd	Trade Allocation Indicator 3 = Allocation Give Up Executor	Integer	
	→	→	Pty					
448					ID	Clearing Group Name	String	OCC
452					R	Party Role 21 = Clearing Organization	Int	21
	→	→	/Pty					
	→	→	Pty					
448					ID	Clearing Member Number	String	00123

Trade Capture Report – Cleared Trades (Including Updates)								
FIX Mapping						Data	Data Type	Sample Data
Tag #	Report Block	Component Block	Sub Component Block	Sub Sub Component Block	Fields			
452					R	Party Role 1 = Executing Clearing Firm	Int	1
	→	→	→	Sub				
523					ID	Account Type (C/F/M)	String	M
803					Typ	26 = Position Account Type	Int	26
	→	→	→	/Sub				
	→	→	/Pty					
			Pty					
448					ID	Sub Account	String	XYZ123
452					R	Party Role 38 = Position Account	Int	38
			/Pty					
	→	→	Pty					
448					ID	Give Up Clearing Member Number	String	
452					R	Party Role 14 = Give Up Clearing Firm	Int	
	→	→	/Pty					
	→	→	Pty					
448					ID	Executing Broker	String	
452					R	Party Role 2 = Executing Broker	Int	
	→	→	/Pty					
	→	→	Pty					
448					ID	Customer Account Number	String	AB3
452					R	Party Role 24 = Customer Account Number	Int	24
	→	→	/Pty					
	→	/RptSide						

Trade Capture Report – Cleared Trades (Including Updates)								
FIX Mapping						Data	Data Type	Sample Data
Tag #	Report Block	Component Block	Sub Component Block	Sub Sub Component Block	Fields			
	→	RptSide						
54					Side	1 = Buy 2 = Sell	Char	1
579					InptDev	Input Device MR=Machine Readable MQ=MQ GUI = ENCORE Entry FXML = FIXML Message RTFX = Real Time FIXML Message	String	FIXML
15					Ccy	Premium Currency	Currency	USD
77					PosEfct	Open Close Code O = Open C = Close	Char	C
58					Txt	Remarks	String	
11					ClOrdID	Order Id	String	128976
582					CustCpcty	CTI Code	Char	1
826					AllocInd	Trade Allocation Indicator 3 = Allocation Give Up Executor	Integer	
	→	→	Pty					
448					ID	Contra Clearing Group Name	String	OCC
452					R	Party Role 21 = Clearing Organization	Int	21
	→	→	/Pty					
	→	→	Pty					
448					ID	Contra Clearing Member Number	String	00789
452					R	18 = Contra Clearing Firm	Int	18
	→	→	→	Sub				

Trade Capture Report – Cleared Trades (Including Updates)								
FIX Mapping						Data	Data Type	Sample Data
Tag #	Report Block	Component Block	Sub Component Block	Sub Sub Component Block	Fields			
523					ID	Contra Account Type	String	C
803					Typ	26 = Position Account Type (C/F/M)	Int	26
	→	→	→	/Sub				
	→	→	/Pty					
			Pty					
448					ID	Contra Sub Account	String	
452					R	Party Role 38 = Position Account	Int	
			/Pty					
	→	→	Pty					
448					ID	Contra Give Up Clearing Member Number	String	
452					R	Party Role 14 = Give Up Clearing Firm	Int	
	→	→	/Pty					
	→	→	Pty					
448					ID	Contra Executing Broker	String	
452					R	26 = Opposite Broker	Int	
	→	→	/Pty					
	→	→	Pty					
448					ID	Contra Customer Account Number	String	12ABC45
452					R	Party Role 24 = Customer Account Number	Int	24
	→	→	/Pty					
	→	/RptSide						
	/TrdCaptRpt							

Message Layout – Trade Capture Report Acknowledgement (Outbound Message) – Rejected Trade Updates

Trade Capture Report Acknowledgement – Update Trades (Reject)								
FIX Mapping						Data	Data Type	Sample Data
Tag #	Report Block	Component Block	Sub Component Block	Sub Sub Component Block	Fields			
	TrdCaptRptAck							
572					RptRefID	Unique Identifier for the trade that was provided to OCC	String	184496521
32					LastQty	Quantity	Qty	1
31					LastPx	Premium	Price	93.89
75					TrdDt	As Of Date	LocalMkt Date	2006-12-04
487					TransTyp	Trade Report Transaction Type 2 = Replace	Int	2
856					RptTyp	Trade Report Type 3 = Reject	Int	3
715					BizDt	Clearing Business Date	LocalMkt Date	2006-12-04
	→	Instrmt						
55					Sym	Symbol	String	AAPL1C
461					CFI	CHAR 1: O for Option, F for Futures CHAR 2: C for Call, P for Put	String	FFSPSX
200					MMY	Expiration Month, Year, and Day	MonthYear	20070414 (4 for year, 2 for month, 2 for day)
202					StrkPx	Strike Price (Decimal Format only) – options only	Price	
	→	/Instrmt						

Trade Capture Report Acknowledgement – Update Trades (Reject)

FIX Mapping						Data	Data Type	Sample Data
Tag #	Report Block	Component Block	Sub Component Block	Sub Sub Component Block	Fields			
	→	RptSide						
54					Side	1 = Buy 2 = Sell	Char	2
77					PosEfct	Open Close Code O = Open C = Close	Char	O
58					Txt	Remarks	String	UPDATE
11					ClOrdID	Order Id	String	98765
TBA					ExchSpecInstr	Exchange Optional Data	String	123XYZ
826					AllocInd	Trade Allocation Indicator 3 = Allocation Give Up Executor	Integer	
582					CustCpcty	CTI Code	Char	1
	→	→	Pty					
448					ID	Clearing Member Number	String	00123
452					R	Party Role 1 = Executing Clearing Firm	Int	1
	→	→	→	Sub				
523					ID	Account Type (C/F/M)	String	M
803					Typ	26 = Position Account Type	Int	26
	→	→	→	/Sub				
	→	→	/Pty					
			Pty					
448					ID	Sub Account	String	XYZ123
452					R	Party Role 38 = Position Account	Int	38
			/Pty					
	→	→	Pty					
448					ID	Give Up Clearing Member Number	String	

Trade Capture Report Acknowledgement – Update Trades (Reject)

FIX Mapping						Data	Data Type	Sample Data
Tag #	Report Block	Component Block	Sub Component Block	Sub Sub Component Block	Fields			
452					R	Party Role 14 = Give Up Clearing Firm	Int	
	→	→	/Pty					
	→	→	Pty					
448					ID	Customer Account Number	String	AB3
452					R	Party Role 24 = Customer Account Number	Int	24
	→	→	/Pty					
	→	/RptSide						
	/TrdCaptRpt Ack							

Sample Messages – Trade Updates

A Clearing Member has a cleared trade and wants to submit updates via ENCORE to update the Order ID (CIOrdID) and CTI code (CustCpcty) and optional Text (Txt).

<u>Attribute</u>	<u>Original Trade</u>	<u>Update Request</u>	<u>Cancel of Original Trade</u>	<u>Add of Updated Trade</u>	<u>Rejected Trade Update Request</u>
RptID	184496521	(RptRefID)184496521	184496521	184496521	184496521
LastQty	1	1	1	1	1
LastPx	93.89	93.89	93.89	93.89	93.89
TransTyp	0	2	1	0	2
RptTyp	2	0	4	4	3
BizDt	2006-12-04	2006-12-04	2006-12-04	2006-12-04	2006-12-04
Sym	AAPL1C	AAPL1C	AAPL1C	AAPL1C	AAPL1C
Side	2	2	2	2	2
Txt		UPDATE		UPDATE	UPDATE
CIOrdID	128976	98765	128976	98765	98765
CustCpcty	2	1	2	1	1
Clearing Firm (ID = X when R = 1)	123	123	123	123	123
SubAccount (ID = X when R = 38)	ABC123	XYZ123	ABC123	XYZ123	XYZ123

Sample Trade Capture Report Inbound Update Message:

```
<TrdCaptRpt RptRefID="184496521" LastQty="1" LastPx="93.89" TransTyp="2" RptTyp="0" BizDt="2006-12-04"
  TrdDt="2006-12-04">
  <Instrmt Sym="AAPL1C" CFI="FFSPSX" MMY="20070119" />
  <RptSide Side="2" PosEfct="0" Txt="UPDATE" ClOrdID="98765" CustCpcty ="1">
    <Pty ID="00123" R="1">
      <Sub ID="M" Typ="26" />
    </Pty>
    <Pty ID="XYZ123" R="38" />
    <Pty ID="AB3" R="24" />
  </RptSide>
</TrdCaptRpt>
```

Sample Trade Capture Report Outbound Update Cancel Message:

```
<TrdCaptRpt RptID="184496521" PrevlyRpted="N" LastQty="1" LastPx="93.89" TrdDt="2006-12-04" TransTyp="1"
RptTyp="4" TrdTyp="0" MtchID="0000012" BizDt="2006-12-04" MtchStat="0">
  <Instrmt Sym="AAPL1C" ID="AAPL1C" Src="8" CFI="FFSPSX" MMY="20070119" MatDt="2007-01-19" Mult="100"
  Exch="XOCH" />
  <RptSide Side="2" InptDev="FXML" Ccy="USD" PosEfct="0" ClOrdID="128976" CustCpcty ="2">
    <Pty ID="OCC" R="21" />
    <Pty ID="00123" R="1">
      <Sub ID="M" Typ="26" />
    </Pty>
    <Pty ID="ABC123" R="38" />
    <Pty ID="AB3" R="24" />
  </RptSide>
  <RptSide Side="1" InptDev="FXML" Ccy="USD" PosEfct="C" ClOrdID="128976" CustCpcty ="1">
    <Pty ID="OCC" R="21" />
    <Pty ID="00789" R="18">
      <Sub ID="C" Typ="26" />
    </Pty>
    <Pty ID="12ABC45" R="24" />
  </RptSide>
</TrdCaptRpt>
```

Sample Trade Capture Report Outbound Update Add Message:

```
<TrdCaptRpt RptID="184496521" PrevlyRpted="N" LastQty="1" LastPx="93.89" TrdDt="2006-12-04" TransTyp="0"
RptTyp="4" TrdTyp="0" MtchID="0000012" BizDt="2006-12-04" MtchStat="0">
  <Instrmt Sym="AAPL1C" ID="AAPL1C" Src="8" CFI="FFSPSX" MMY="20070119" MatDt="2007-01-19" Mult="100"
  Exch="XOCH" />
  <RptSide Side="2" InptDev="FXML" Ccy="USD" PosEfct="O" Txt="UPDATE" ClOrdID="98765" CustCpcty ="1">
    <Pty ID="OCC" R="21" />
    <Pty ID="00123" R="1">
      <Sub ID="M" Typ="26" />
    </Pty>
    <Pty ID="XYZ123" R="38" />
    <Pty ID="AB3" R="24" />
  </RptSide>
  <RptSide Side="1" InptDev="FXML" Ccy="USD" PosEfct="C" ClOrdID="128976" CustCpcty ="1">
    <Pty ID="OCC" R="21" />
    <Pty ID="00789" R="18">
      <Sub ID="C" Typ="26" />
    </Pty>
    <Pty ID="12ABC45" R="24" />
  </RptSide>
</TrdCaptRpt>
```

Sample Trade Capture Report Acknowledgement Message (reject):

```
<TrdCaptRptAck RptRefID="184496521" LastQty="0000001" LastPx ="93.89" TrdDt="2006-12-04" TransTyp="2"
RptTyp="3" BizDt="2006-12-04">
  <Instrmt Sym="AAPL1C" CFI="FFSPSX" MMY="20070119" />
  <RptSide Side="2" PosEfct="O" Txt="UPDATE" ClOrdID="98765" CustCpcty ="1">
    <Pty ID="00123" R="1">
      <Sub ID="M" R="26" />
    </Pty>
    <Pty ID="XYZ123" R="38" />
    <Pty ID="AB3" R="24" />
  </RptSide>
</TrdCaptRptAck>
```

Implementation Considerations

General

Trade Capture Report and Trade Capture Report Acknowledgement Transmissions will be created real time. Regardless of how these messages are delivered to a recipient (real time or batch file), recipients must be able to process each message as either canceled, updated or rejected (TrdCaptRptAck). The recipient systems must use the following fields to determine how to process the message:

RptID (RptRefID)– unique identifier for a the trade – Updated trade messages will repeat the original trade RptId. Inbound and Rejected 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

TrdType – 0 (Regular Trade), 1 (EFP), 2 (Block Trade)

Trade Update Matrix

Trade Capture Report	<u>Trans Type</u>	<u>Rpt Typ</u>	<u>Trd Typ</u>	<u>BizDt</u>
Inbound Trade Update	2	0	0/1/2	Current External ENCORE Date
Trade Update Outbound Cancel Original Trade	1	4	0/1/2	Current External ENCORE Date
Trade Update Outbound Add Trade including Updates	0	4	0/1/2	Current External ENCORE Date
Trade Update Reject Message (TrdCaptRptAck)	2	3	0/1/2	Current External ENCORE Date

Additional Considerations

Rejected Trade Modification Updates

Due to the nature of rejected transactions, it should be noted that any rejected data transmitted via a DDS message may be invalid or be of an invalid type. For example, if a trade is received with a quantity of ABC, the trade will be rejected and the 'ABC' will be placed into an XML tag with a datatype of Qty (whole numbers only). This will not present a problem at OCC in regards to the construction and transmission of the message but should be a consideration for any recipients of DDS data that plan to validate against the FIXML schema.

The input source for the rejected transfers will always be a machine readable file. GUI transactions will not generate rejected messages.