



**THE FOUNDATION
FOR SECURE
MARKETS**

ENCORE On-Demand Request
Developer Reference Guide

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Document Organization

On-Demand Request capabilities allow Clearing Members to request and receive a batch DDS file intraday to aid in reconciliation and processing.

On-Demand Requests can be initiated manually through ENCORE. They can be scheduled to execute daily at a specific time, or they can be requested by means of an inbound batch or real-time FIXML message.

The current data meeting the given request criteria are generated in a batch DDS format and transmitted to the requesting Clearing Member's target destination. In addition, within the file, an acknowledgement message is included that summarizes the results of the query.

This guide includes the FIXML elements, transmission layouts, message structures, and sample messages for each transmission type related to On-Demand Requests. It is intended for use as a transmission mapping reference for FIXML developers.

The following On-Demand Request transmissions are defined in this guide:

On-Demand Positions

- Inbound FIXML: Request for Position
- Outbound DDS: Request for Position Acknowledgement

Data Distribution Services Overview

This reference document provides an overview of the Data Distribution Services (DDS) system and contains the design concepts and the data delivery services being developed and implemented.

Implementation Considerations

Sample 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 are not broken into multiple lines or blocks.

Batch DDS File Structure

Within each DDS file, the overall structure of the data is as follows, noting that messages have been abbreviated:

```
<FIXML r="20030618" s="20040109" v="4.4" xr="FIA" xv="1"
xmlns="http://www.fixprotocol.org/FIXML-4-4" ...>
<Batch>
<ReqForPossAck... </ReqForPossAck>
<PosRpt ... </PosRpt>
<PosRpt ... </PosRpt>
<PosRpt ... </PosRpt>
</Batch>
</FIXML>
```

XML and FIXML Extensions Version Identification

FIXML versions are identified explicitly in the schema file names and also with constant attribute values defined in the fixml-component-base schema file.

FIXML Schema File Versioning

FIXML Schema employed the file naming convention developed for FpML. The major and minor version numbers of the FIX version represented by the schema are appended to all FIXML schema file names. This approach was taken to explicitly force users to recognize when counterparties have changed their version of the schema.

FIXML Message Versioning

The FIXML root element <FIXML> contains five attributes that define the version of the message. The FIXML root element is defined in the fixml-components-base schema file.

Table 1: Attribute Description Format Example

Attribute	Description	Format	Example
v	FIX Version	N.N	4.4
r	FIX Version release date (used to designate errata releases between FIX versions)	YYYYMMDD	20030618
s	Schema Release (used to designate schema releases between errata releases)	YYYYMMDD	20040109
xv	FIXML Extensions Version	N.N	1.1

Attribute	Description	Format	Example
xr	FIXML Extensions Originator	String	FIA

```
<FIXML r="20030618" s="20040109" v="4.4" xr="FIA" xv="1.1"
xmlns="http://www.fixprotocol.org/FIXML-4-4"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://www.fixprotocol.org/FIXML-4-4
https://www.theocc.com/getmedia/11f77dc2-98cf-4d31-898a-
a95eb91abc9b/fixml-main-4-4-FIA-1-1.xsd">
```

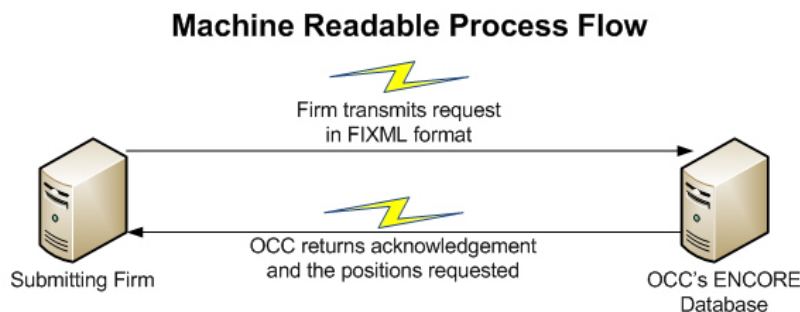
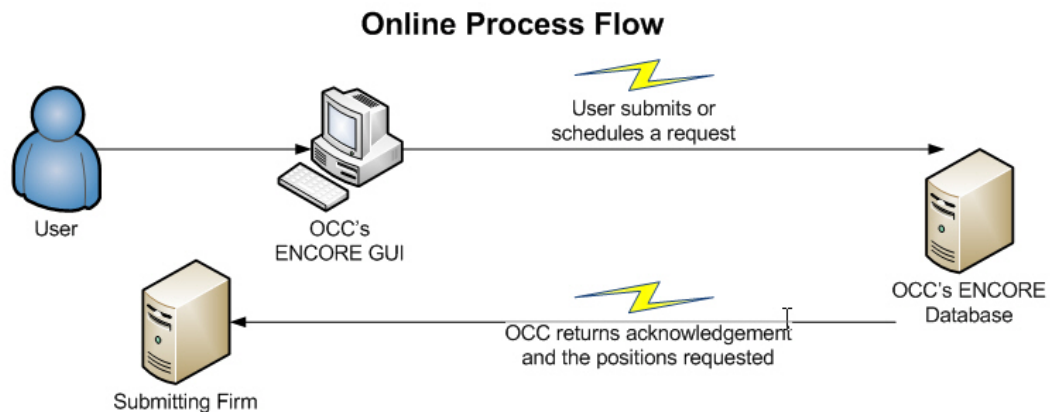
On-Demand Positions

On-Demand Positions allow Clearing Members to request and receive a batch DDS file of their current positions during the business day to aid in position reconciliation and weekday expiration processing.

On-Demand Position Requests can be rejected due to the following reasons:

- ENCORE window is closed.
- No positions exist for the criteria provided.
- Requestor is not authorized to request positions for Clearing Member number.
- Required fields were not supplied.

The following diagram shows the process for submitting the Request for Positions to OCC either through the ENCORE user interface or a machine readable request. Once the request is received, OCC returns the acknowledgement and requested positions.



On-Demand Position Requests submitted via FIXML that are rejected result in a batch DS file containing only the Request for Position Acknowledgement message.

```
<FIXML r="20030618" s="20040109" v="4.4" xr="FIA" xv="1"
xmlns="http://www.fixprotocol.org/FIXML-4-4" ...>
<Batch>
<ReqForPossAck... </ReqForPossAck>
</Batch>
</FIXML>
```

If the request is successful, both the Request for Position Acknowledgement message and the individual Intraday Position Reports are included in the single batch DDS file.

```
<FIXML r="20030618" s="20040109" v="4.4" xr="FIA" xv="1"
xmlns="http://www.fixprotocol.org/FIXML-4-4" ...>
<Batch>
<ReqForPossAck... </ReqForPossAck>
<PosRpt ... </PosRpt>
<PosRpt ... </PosRpt>
<PosRpt ... </PosRpt>
</Batch>
</FIXML>
```

Outbound File Naming (For Pull Recipients)

For Pull recipients, each new request generates an outbound file with the standard naming convention “ODPfile.xml”, where “ODPfile” is the file name identified by the external party. After each request, the most recently produced outbound file (ODPfile.xml) is indexed, for example “ODPfile_1.xml”. The index value is based on the next highest value for files currently sitting in the data directory for that firm.

For standing requests, there is an additional option to append the outbound file with a date and timestamp (ODPfile_YYYYMMDD_HHMM.xml). For example, if the batch file name is “ODPfile.xml”, the business date is March 17, 2014, and the standing request is for 1 p.m., then the appended file name is “ODPfile_20140317_1300.xml”

Please note, the naming convention for Push recipients is determined by the recipient of the file and cannot be adjusted to include a date/timestamp.

ENCORE Transmission: Request for Position

FIX Message: CM to OCC (New)	Request for Position
------------------------------	----------------------

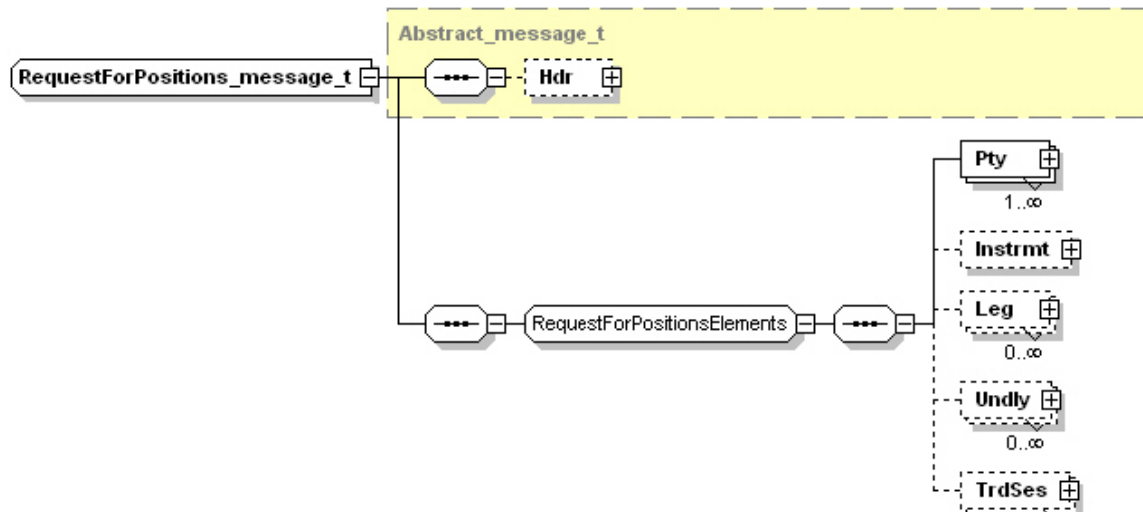
Overview

Clearing Members can submit the Request for Position to generate DDS messages listing their current positions.

The request can include all positions within the Clearing Membership, specific account types, a specific expiration date and/or up to 40 symbols. If the account type is not specified in the message, the positions for all account types are included in the file. Likewise, if a specific expiration date is not included, positions for all expiration dates are included in the file. Finally, if no individual symbols are specified, all positions meeting the other criteria are returned. In addition, Clearing Members with multiple clearing numbers can request multiple Clearing Members within a message by repeating the party blocks.

Requests can be submitted via batch or real-time.

Message Structure



Message Layout - Request for Positions

FIXML Message							Definitions		
Tag#	Report	Comp	Sub Comp	Sub Sub Comp	Field Name	Data	Data Type	Sample Data	Max Length
	ReqForPoss								
715					BizDt	Clearing Business Date	LocalMktDate	2008-09-12	10
724					ReqTyp	Request Type 0 = Positions	Int	0	1
710					ReqID	Unique identifier for the request as assigned by submitting firm	String	1234567	30
60					TxnTm	Time of request YYYY-MM-DDTHH:MM:SS	UTC Timestamp	2012-06-18T18:55:28	17
716					SetSesID	Settlement Session ID ITD = Intraday	String	ITD	3
	→	Pty							
448					ID	Clearing Member Number	String	00123	5
452					R	Party Role 4 = Clearing Firm	Int	4	1
	→	→	Sub						
523					ID	Account Type	String	C	1
803					Typ	Party Role 26 = Position Account Type	Int	26	2
	→	→	/Sub						
	→	/Pty							
	→	Instrmt							
541					MatDt	Expiration Date	LocalMktDate	2008-09-13	10
	→	→	AID						
455					AltID	Symbol	String	GOOG	6
456					AltIDSrc	8 = Symbol	String	8	1

FIXML Message							Definitions		
Tag#	Report	Comp	Sub Comp	Sub Sub Comp	Field Name	Data	Data Type	Sample Data	Max Length
	→	→	/AID						
	→	/Instrmt							
	/ReqForPoss								

Sample Message – Request for Positions

```
<FIXML r="20030618" s="20040109" v="4.4" xr="FIA" xv="1"
xmlns="http://www.fixprotocol.org/FIXML-4-4"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation
="http://www.fixprotocol.org/FIXML-4-4
https://prd.theocc.com/getmedia/11f77dc2-98cf-4d31-898a-
a95eb91abc9b/fixml-main-4-4-FIA-1-1.xsd;">
<ReqForPoss BizDt="2009-10-02" ReqTyp="0" ReqID="1234567" TxnTm="2009-10-
02T09:59:24" SetSesID="ITD">
  <Pty ID="00123" R="4">
    <Sub ID="C" Typ="26"></Sub>
  </Pty>
  <Instrmt MatDt="2009-10-14">
    <AID AltID="GOOG" AltIDSrc="8"/>
    <AID AltID="IBM" AltIDSrc="8"/>
    <AID AltID="SPX" AltIDSrc="8"/>
    <AID AltID="VIX" AltIDSrc="8"/>
  </Instrmt>
</ReqForPoss>
</FIXML>
```

Implementation Considerations

If a tag on a FIXML message exceeds the maximum length, the message is invalid. The only exception is for the Txt tag, in which case only the first 25 characters are written to the database. The Max Length column on all the message layouts presented below represent the allowed maximum length for each field.

The sub-party block (account type/role), maturity date (expiration date) and SecurityAlternateID block (individual symbol) are optional fields; all others are required.

Only one expiration date may be requested at a time.

The security alternate ID block is a repeating block that may be used to request multiple symbols. Up to 40 symbols may be requested at a time. If over 40 symbols are requested, only 40 symbols will be processed. The 40 symbols processed will appear in the Request for Positions Acknowledgement message.

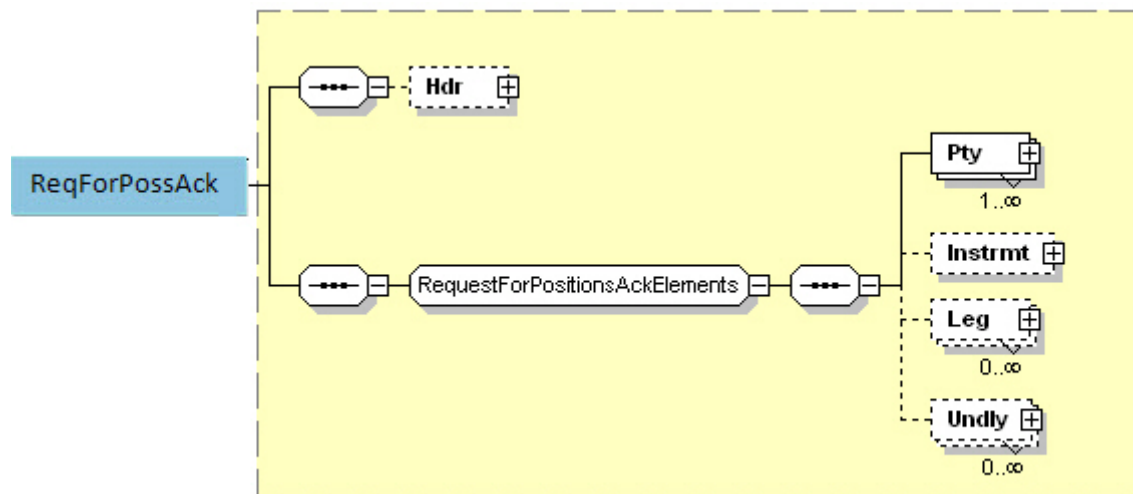
ENCORE Transmission: Request for Position Acknowledgement

FIXML Message: OCC to CM	Request for Position Acknowledgement
Delivery Options	Batch File

Overview

The Request for Position Acknowledgement message includes the criteria provided in the position request, as well as the request status, total number of position records and the request results.

Message Structure



Message Layout – Request for Position Acknowledgement

Request For Positions Acknowledgement							
FIX Mapping					Data	Data Type	Sample Data
Tag#	Report Block	Component Block	Sub Component Block	Fields			
	ReqFor PossAck						
721				RptID	Unique Identifier of the Position Acknowledgement	String	3342
715				BizDt	Clearing Business Date	LocalMktDate	2009-10-27
724				ReqTyp	Request Type 0 = Positions	Int	0
710				ReqID	Unique identifier for the request (populated only when request submitted by FIXML; contains value from inbound FIXML request)	String	1234567
727				TotRpts	Total number of position records being returned by the request	Int	19
728				Rslt	Position Request Result 0 = Valid request 1 = Invalid request 2 = No positions found that match criteria 3 = Not authorized to request positions	Int	0
729				Stat	Status of the Position Request 0 = Completed 2 = Rejected	Int	0
716				SetSesID	Settlement Session ID ITD = Intraday	String	ITD
60				TxnTm	Time request was processed	UTC Timestamp	2010-02-25T14:40:31
	→	Pty					
448				ID	Clearing Member Number	String	00123
452				R	Party Role 4 = Clearing Firm	Int	4
	→	→	Sub				

Request For Positions Acknowledgement							
FIX Mapping					Data	Data Type	Sample Data
Tag#	Report Block	Component Block	Sub Component Block	Fields			
523				ID	Account Type	String	C
803				Typ	Party Role 26 = Position Account Type	Int	26
	→	→	/Sub				
	→		/Pty				
	→		Instrmt				
541				MatDt	Expiration Date	LocalMktDate	2009-10-28
	→	→	AID				
455				AltID	Symbol	String	GOOG
456				AltIDSrc	8 = Symbol	String	8
	→	→	/AID				
	→		/Instrmt				
	/ReqFor PosAck						

Sample Message – Request for Position Acknowledgement

```

<ReqForPossAck RptID="3342" BizDt="2009-10-27" ReqTyp="0" TotRpts="19"
  Rslt="0" Stat="0" SetSesID="ITD" TxnTm=" 2010-02-25T14:40:31">
  <Pty ID="00123" R="4">
    <Sub ID="C" Typ="26" />
  </Pty>
  <Pty ID="00123" R="4">
    <Sub ID="F" Typ="26" />
  </Pty>
  <Instrmt MatDt="2010-03-13">
    <AID AltID="GOOG" AltIDSrc="8"/>
    <AID AltID="IBM" AltIDSrc="8"/>
    <AID AltID="SPX" AltIDSrc="8"/>
    <AID AltID="VIX" AltIDSrc="8"/>
  </Instrmt>
</ReqForPossAck>

```

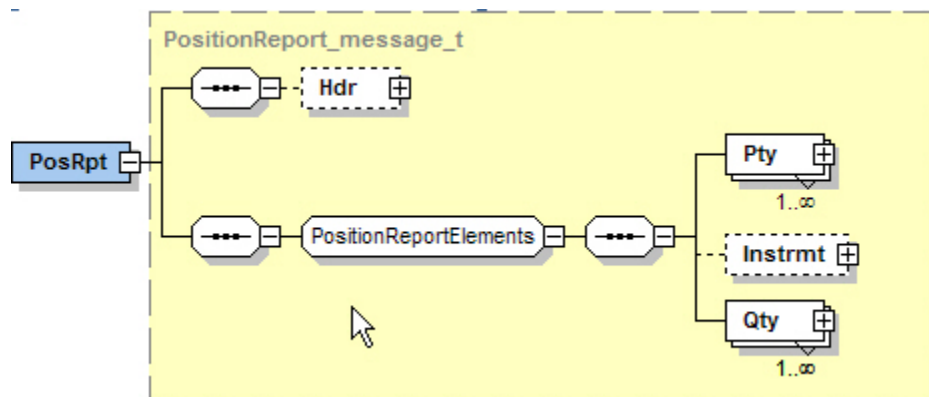
ENCORE Transmission: Intraday Position Report

FIX Message OCC to CM	Intraday Position Report
Delivery Options	Batch File

Overview

The Intraday Position Report DDS lists the requesting Clearing Member's Start of Day and Current position. The Current position reflects the Clearing Member position quantity as of the time of the request.

Message Structure



Message Layout - On-Demand Intraday Position Report

Intraday Position Report – Positions							
FIX Mapping					Data	Data Type	Sample Data
Tag#	Report Block	Component Block	Sub Component Block	Fields			
	PosRpt						
721				RptID	Unique Identifier of the Position	String	326877967
715				BizDt	Clearing Business Date	LocalMktDate	2008-10-27
724				ReqTyp	Request Type 0 = Positions	Int	0
15				Ccy	Currency	Currency	USD
716				SetSesID	Settlement Session ID (ITD = Intraday)	String	ITD
	→	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
452				R	Party Role 4 = Clearing Firm	Int	4
	→	→	Sub				
523				ID	Account Type	String	C
803				Typ	Party Role 26 = Position Account Type	Int	26
	→	→	/Sub				
	→	/Pty					
	→	Pty					
448				ID	Sub Account	String	SPO

Intraday Position Report – Positions

FIX Mapping					Data	Data Type	Sample Data
Tag#	Report Block	Component Block	Sub Component Block	Fields			
452				R	Party Role 38 = Position Account	Int	38
	→	/Pty					
	→	Instrmt					
55				Sym	Symbol	String	WTL
48				ID	Futures Symbol (not applicable for options)	String	
22				Src	8 = Exchange Symbol (not applicable for options)	String	
461				CFI	Default Values	String	OCASCN
200				MMY	Contract Series Month, Year, and Day	Month Year	20100116
541				MatDt	Expiration Date	LocalMktDate	2010-01-16
202				StrkPx	Strike Price (decimal format) (not applicable for futures)	Price	7.500
947				StrkCcy	Strike Currency (not applicable for futures)	Currency	USD
967				StrkMult	Strike Multiplier (not applicable for futures)	Float	1
968				StrkValu	Strike Value (not applicable for futures)	Decimal	100
231				Mult	Multiplier	Decimal	100
	→	/Instrmt					
	→	Qty					
703				Typ	Quantity Type SOD = Start of Day	String	SOD
704				Long	Start Long	Qty	10
705				Short	Start Short	Qty	0
	→	/Qty					
	→	Qty					
703				Typ	Quantity Type ITD = Intra-Day	String	ITD
704				Long	Current Long	Qty	11
705				Short	Current Short	Qty	0

Intraday Position Report – Positions							
FIX Mapping					Data	Data Type	Sample Data
Tag#	Report Block	Component Block	Sub Component Block	Fields			
	→	/Qty					
	→	Qty	Note: This block repeats if an excess closing buy and/or sell exists on the position. This block will not be present if no excess quantities exist.				
703				Typ	Quantity Type XSCB = Excess Closing Buy	String	XSCB
703				Typ	Quantity Type XSCS = Excess Closing Sell	String	XSCS
704				Long	Increased Long	Qty	1
705				Short	Increased Short	Qty	0
	→	/Qty					
		/PosRpt					

Sample Message – Intraday Position Report - Options

```

<PosRpt RptID="635721910" BizDt="2009-10-27" ReqTyp="0" Ccy="USD" SetSesID="ITD">
  <Pty ID="OCC" R="21" />
  <Pty ID="00123" R="4">
    <Sub ID="C" Typ="26" />
  </Pty>
  <Instrmt Sym="WTL" CFI="OCASCN" MMY="20100116" MatDt="2010-01-16"
    StrkPx="7.500" StrkCcy="USD" StrkMult="1" StrkValu="100" Mult="100" />
  <Qty Typ="SOD" Long="10" Short="0" />
  <Qty Typ="ITD" Long="11" Short="0" />
  <Qty Typ="XSCB" Long="1" Short="0" />
  <Qty Typ="XSCS" Long="0" Short="0" />
</PosRpt>

```

Intraday Position Report – Futures

```
<PosRpt RptID="900353817" BizDt="2009-10-27" ReqTyp="0" Ccy="USD" SetSesID="ITD">
  <Pty ID="OCC" R="21" />
  <Pty ID="00123" R="4">
    <Sub ID="C" Typ="26" />
  </Pty>
  <Instrmt Sym="YG" ID="YG" Src="8" CFI="FFIP SX" MMY="20101229"
    MatDt="2010-12-29" Mult="33" />
  <Qty Typ="SOD" Long="1" Short="0" />
  <Qty Typ="ITD" Long="1" Short="0" />
</PosRpt
```

Implementation Considerations

Results include all parties within an account; both options and futures.

Results are prior to exercises/assignments, unmatched transfers, PCS and unclaimed allocations.

The Excess Closing Buy/Excess Closing Sell Quantity Type block repeats if an excess closing buy and/or sell exists on the position. This block will not be present if no excess quantities exist.

Appendix – Revision History

Version	Date	Author	Version Updates
1.2	7/11/2014	OCC	<p>Adjust title from <i>ENCORE DDS Guide On-Demand Requests Supplement</i> to <i>ENCORE On-Demand Request Developer Reference Guide</i>.</p> <p>Add functionality to include optional date and timestamp in file name of standing requests for pull/SFTP Intra-Day Position Reports.</p> <p>Correction to remove ReqID tag from the Intra-Day Position Report layout.</p> <p>Update logo on cover page.</p> <p>Add Revision History.</p>
1.3	1/26/2017	OCC	Change http://optionsclearing.com URL to https://www.theocc.com
1.4	3/7/2017	OCC	Intraday Position Report – Add new Position Quantity Type values for excess closing buy and excess closing sell.
1.5	8/28/2018	OCC	Apply branding updates.
1.6	6/28/2020	OCC	Revise the www.TheOCC.com web site URLs for FIXML schema to reflect new web site organization.