

Specification

30 March 2017

CURRENEX

Currenex_NOW Level One FIX Specification

Please contact Currenex sales representatives and help desk personnel for more information on this documentation.

Table of Contents

1	Introduction	2
1.1	Purpose	2
2	Product Overview	3
3	FIX Service	4
3.1	Availability	4
3.2	FIX Sequence Numbering	4
3.2.1	Message Persistence	4
3.2.2	Weekly Sequence Number Reset	4
4	Message and Workflow Details	5
4.1	Session Messages	5
4.1.1	Standard Header	5
4.1.2	Standard Trailer	5
4.1.3	Heartbeat	5
4.1.4	Login	6
4.1.5	Logout	6
4.2	Subscription and Message Flow	7
4.3	Application Messages	8
4.3.1	Market Data Request	8
4.3.2	Market Data Request Reject	9
4.3.3	Market Data - Incremental Refresh NOW_Level1	10

Currenex Client Support

US Toll Free: + 1 877 939 8723

London: + 0 800 358 5331

Singapore: + 65 6826 7476

Tokyo: + 813 4530 7555

All Other Countries:

Primary: + 1 212-340-1790

Secondary: + 1 212-685-5950

support@currenex.com

Currenex Sales

New York: + 212 340 5220

London: + 44 203 395 7930

Tokyo: + 81 3 4530 7555

Singapore: + 65 6826 7476

Hong Kong: +852 2230 1566

Australia: + 612 8429 1204

sales@currenex.com

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1 Introduction

1.1 Purpose

This document describes the FIX messages used to deliver Currenex_NOW Level One (L1) market data.

The products and services outlined herein are only offered to professional clients or eligible counterparties through State Street Bank and Trust Company (a wholly-owned subsidiary of State Street Corporation), or, within certain jurisdictions throughout Europe, through State Street Global Exchange Trading and Clearing International Limited which is authorized and regulated by the Financial Services Authority. Please note, certain foreign exchange business (spot and certain forward transactions) are not regulated by the Financial Services Authority. Clients should be aware of the risks of participating in trading foreign exchange, equities, fixed income or derivative instruments or in investments in non-liquid or emerging markets. Clients should be aware that products and services outlined herein may put their capital at risk. This communication is not intended for retail clients, nor for distribution to, and may not be relied upon by, any person or entity in any jurisdiction or country where such distribution or use would be contrary to applicable law or regulation. This publication or any portion hereof may not be reprinted, sold or redistributed without the prior written consent of State Street Global Exchange Trading and Clearing. This communication is being distributed in Australia by State Street Bank and Trust Company ABN 70 062 819 630, AFSL 239679 and is intended only for wholesale clients, as defined in the Corporations Act 2001.

2 Product Overview

The Currenex_NOW service provides real-time access to FOREX spot market data. Currenex Now Level One (L1) provides the best Bid/Offer rates only with no amounts.

3 FIX Service

Access to Currenex_NOW L1 data is supported via the Financial Information eXchange (FIX) protocol.

Currenex_NOW L1 supports FIX 4.4 version messaging, only. Requests made using FIX 4.2 will be rejected.

3.1 Availability

The FIX service is available from 5 pm ET Sunday to 5 pm ET Fridays.

3.2 FIX Sequence Numbering

3.2.1 Message Persistence

Currenex_NOW FIX messages are not persisted. The initial inbound and outbound sequence numbers on any Logon message should always be one (1) and or have ResetSeqNumFlag (141) set to 'Y.'

3.2.2 Weekly Sequence Number Reset

Currenex resets its FIX Market Data Service sequence numbers to one (1) weekly when the service is offline, Friday 17:00:00 EST/EDT until Sunday 17:00:00 EST/EDT.

Once the service is back on line, a client must also have its inbound and outbound sequence numbers reset to one (1).

4 Message and Workflow Details

The standard Currenex FIX message header, trailer, heartbeat, logon, and logout message apply for the Currenex_NOW service. For completeness, these messages are repeated in the following section. All messaging is FIX 4.4.

The values under the “Required” column indicate one of the following:

- ‘Y’ – Field is mandatory and will or must be present on the message.
- ‘N’ – Non-required field that should be omitted unless directed otherwise by Currenex.

Note: ***Bold italics*** font is used to indicate fields that are members of a repeating group

4.1 Session Messages

4.1.1 Standard Header

Tag	Field Name	Required	Comments
8	BeginString	Y	Message start. Handled by the FIX engine. FIX 4.4 is required.
9	BodyLength	Y	Message length. Handled by the FIX engine.
34	MsgSeqNum	Y	Message sequence number count. Handled by the FIX engine.
35	MsgType	Y	The message type. Refer to individual messages for valid values.
49	SenderCompID	Y	Provided by Currenex: the user’s trading account id.
52	SendingTime	Y	The GMT timestamp on the message. Handled by FIX engine; e.g., 20070214-20:07:28.196
56	TargetCompID	Y	CNX = default; can be changed upon request.

4.1.2 Standard Trailer

Tag	Field Name	Required	Comments
10	Checksum	Y	A value calculated by the FIX engine from the message data and transferred with the data. If the data received does not match the CheckSum (10) value, the data was corrupted in transit.

4.1.3 Heartbeat

Tag	Field Name	Required	Comments
	<i>Standard Header</i>	Y	MsgType (35=0)
112	TestReqID	C	Required if heartbeat is due to a TestRequest (35=1)

Tag	Field Name	Required	Comments
			message.
	<i>Standard Trailer</i>	Y	

4.1.4 Logon

Tag	Field Name	Required	Comments
	<i>Standard Header</i>	Y	MsgType (35=A)
98	EncryptMethod	Y	0 – not encrypted is the only accepted value.
108	HeartBtInt	Y	Heartbeat interval in seconds.
141	ResetSeqNumFlag	N	Y – Resets both the inbound and outbound sequence numbers to one (1).
554	Password	Y	Id specific password
	<i>Standard Trailer</i>	Y	

4.1.5 Logout

Tag	Field Name	Required	Comments
	<i>Standard Header</i>	Y	MsgType (35=5)
58	Text	N	Descriptive text message.
	<i>Standard Trailer</i>	Y	

4.2 Subscription and Message Flow

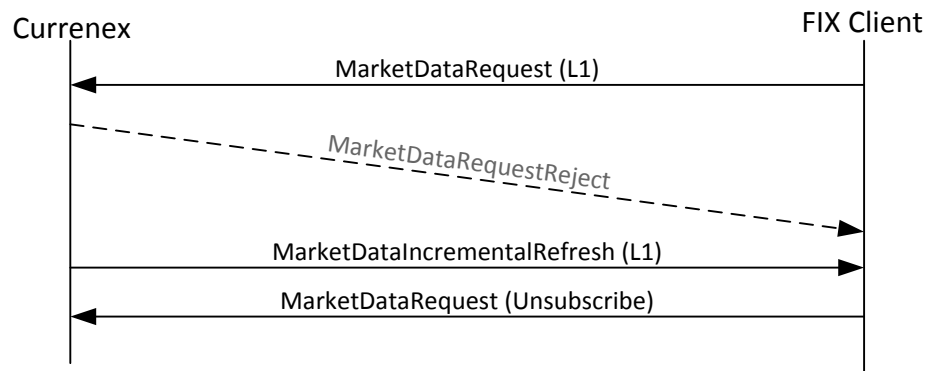


Figure 1: CNX NOW L1 Data Subscription and Streaming

Subscriptions to Currenex_NOW data is made by service and currency pair. A subscription that cannot be processed will be rejected. A successful subscription will be responded to with data messages.

4.3 Application Messages

4.3.1 Market Data Request

Tag	Field Name	Required	Comments
	Standard Header	Y	MsgType (35=V)
262	MDReqID	Y	A unique ID assigned by the client to the Market Data Request. The same MDReqID (262) is used in subscribing and unsubscribing to data within the same session.
263	SubscriptionRequestType	Y	Data request type: C – Currenex Now Snapshot and Update Request U – Unsubscribe from a previous Currenex Now request
264	MarketDepth	Y	1 - Only value supported.
Component <MDReqGrp>			
267	NoMDEntryTypes	Y	Number of services being requested; i.e., the number of times MDEntryType (269) is repeated: 1 - only value supported.
269	MDEntryType	Y	Requested Market Data type: I – Level One (L1) best bid/best offer Note: Lowercase symbols are used due to their being available in FIX 5.0.
End Component <MDReqGrp>			
Component < InstrmtMDReqGrp >			
146	NoRelatedSym	Y	Number of related symbols in the request: 1 – Only value supported.
Component < Instrument >			
55	Symbol	Y	Currency pair for which the request is being made.
65	SymbolSfx	Y	SP – spot is the only value supported
End Component < Instrument >			
End Component < InstrmtMDReqGrp >			

4.3.2 Market Data Request Reject

Tag	Field Name	Required	Comments
	Standard Header	Y	MsgType (35=Y)
262	MDReqID	Y	A unique ID assigned by the client to the Market Data Request.
281	MDReqRejReason	Y	Text description of the rejection: 0 = Unknown symbol 1 = Duplicate MDReqID 2 = Insufficient Bandwidth 3 = Insufficient Permissions 4 = Unsupported SubscriptionRequestType 8 = Unsupported MDEntryType
58	Text	N	Free format text string. Note: there is no specified maximum length for this field.

4.3.3 Market Data - Incremental Refresh NOW_Level1

Tag	Field Name	Required	Comments
	Standard Header	Y	MsgType (35=X)
1022	MDFeedType	Y	I = NOW_Level1 This is a FIX 5.0 tag.
262	MDReqID	Y	The unique ID assigned by the client to the Market Data Request.
Component <MDIncGrp>			
268	NoMDEntries	Y	Number of entries following. Maximum is 2.
	279 MDUpdateAction	Y	0 = New – only value supported
	264 MarketDepth	Y	Book depth level. 1 – Supported Value
	269 MDEntryType	Y	Requested Market Data type: 0 = Bid 1 = Offer
Component <Instrument>			
	55 Symbol	Y	Currency pair symbol
	65 SymbolSfx	Y	SP = spot – only value supported
End Component <Instrument>			
	270 MDEntryPx	Y	The spot rate
End Component < MDIncGrp >			