

# Trading Technologies FIX Symbology

## Frequently-Asked Questions

**My OMS is programmed to send and receive Bloomberg codes. Does TT's FIX Adapter support Bloomberg codes as an alternative to its native symbology?**

The TT FIX Adapter uses exchange-native symbols rather than proprietary vendor codes. TT believes that representing tradable instruments as they are sent and received by exchanges is the most open and vendor-neutral way to define instruments. Additionally, many proprietary vendor symbologies exist today, including Bloomberg, Reuters, and others. It is not feasible for TT to support many different symbologies in place of native exchange representations.

**What are the main differences between a proprietary symbol set and the symbology used by the TT FIX Adapter?**

Many vendors developed their symbologies without considering the FIX protocol. While the FIX protocol specifies using multiple tags to represent a single tradable instrument, vendors often condense some of these tags into one symbol. In other cases, they invent new symbols.

**Why did some vendors choose this approach?**

FIX was initiated in 1992, whereas some vendors' code sets predate that by ten or more years. Many vendors created their symbols for use on terminals, so that users could type a single value rather than entering a multi-part name to specify a given instrument. In some cases, this value is derived in part from the exchange-defined symbol, but in others it is not. Despite the lack of consistency, some proprietary code sets have become established as proprietary "standards." But unlike open standards, some vendors require expensive and restrictive licenses just to use their symbologies. TT believes that this proprietary approach does not serve the interests of the end-user and is therefore committed to using only exchange-defined symbols.<sup>(1)</sup>

**OK, so explain the FIX approach to symbology**

Let's consider a futures contract. In FIX a basic futures contract is specified with four tags: Security Exchange, Security Type, Symbol, and Maturity Month Year, and the FIX protocol<sup>(2)</sup> specifies the tag values for these fields as follows:

- Security Exchange = 207
- Security Type = 167
- Symbol = 55
- Maturity Month Year = 200

To specify the March 2011 E-mini S&P 500 contract, the FIX message on TT would specify the following:

```
207 = CME, 167 = FUT, 55=ES, 200=201103
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On the other hand, a Bloomberg code for this instrument is ESH1. Assuming the user knows that ESH1 is a futures contract that trades on CME, then a mapping to FIX can be created by parsing the string and deriving the appropriate tags:

Tag 200 = 201103, where H = 03, 1 = 2011

ESH1

Tag 55 = ES

However, because vendor codes can use non-standard symbols, this approach might not be effective for all products.

**How are products other than futures represented in FIX?**

The following table shows the FIX tags that uniquely identify all exchange listed outright contracts.<sup>(3)</sup>

FIX Tag	Option	Future	Energy	FX	FX Non-Deliverable Forward	Debt	Stock
167 (Security Type)	OPT	FUT	NRG	FX	FXNDF	GOVT	CS
207 (SecurityExchange)	X	X	X	X	X	X	X
55 (Symbol)	X	X	X	X	X	X	X
200 (MaturityMonthYear)	X	X	X				
201 (PutOrCall)		'0'=Put '1'=Call					
202 (StrikePrice)		X					
18211 (DeliveryTerm)			'Q'=Quarterly, 'S'=Seasonal, 'Y'=Yearly				
63 (SettlType)					'DX'=X Days, 'WX'=X Weeks, 'MX'=X Months, 'YX'=X Years		

**Where can I find the exchange-defined product symbol to use in tag 55?**

Customers can use TT's online product database<sup>(4)</sup> to find the true symbol. The built-in search capabilities provided by this database provide users the ability to easily find the product data associated with exchange-listed products. In addition, TT offers a free-of-charge developer support program to help FIX developers create applications that connect to the TT FIX Adapter.

**How can I find the exchange codes needed for tag 207?**

It is easy. For example, tag 207 for the Chicago Mercantile Exchange is simply CME. For a complete set of exchange tag values, please see the *TT FIX Adapter Reference Manual*.

- 1 In rare cases when a TT Gateway connects to an exchange that lists multiple products with the same symbol, TT modifies the symbol with additional exchange-provided data to ensure uniqueness.
- 2 <http://www.fixprotocol.org/FIXimate3.0/>
- 3 For information regarding the representation of multi-leg strategy contracts, see the *TT FIX Adapter Reference Manual*
- 4 <http://www.tradingtechnologies.com/productdb/>