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| |  | | --- | |  | | **FXCM FIX API**  **Quick start guide** | |  | |

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# Introduction:

FXCM provides FIX API to interact with its trading platform. Based on FIX protocol 4.4, it is designed for real-time, custom institutional trading which push non-throttle real time price update via FIX session (no available on other APIs). An FXCM TSII account with a $5,000 minimum balance is required.

In this document, you will learn how to get start, how to connect, request live price update, retrieve table information and place basic orders.

Client communicate with server via FIX messages. So it is cross languages and cross operating systems. In this document. We will provide 3 sample projects in Java NetBeans, C++ and C#. Of cause, you can also use commercial FIX engines as well as open-source alternatives.

# Prerequisites

* First you need to open a demo TSII account at [here](https://www.fxcm.com/uk/algorithmic-trading/api-trading/)
* Send your login to [api@fxcm.com](mailto:api@fxcm.com) to get FIX sessions.
* 1-2 business days, you will get a mail that include the FIX credentials, documents and sample code.
* You need to install software development environment (SDE). For Java, you can try [Eclipse](https://www.eclipse.org/downloads/) or [NetBeans](https://netbeans.org/downloads/), For C++/C#, please download [Visual studio](https://visualstudio.microsoft.com/downloads/)
* You also need to download FIX protocol package. [QuickFix/J](http://www.quickfixj.org/) or [QuickFix/N](http://quickfixn.org/)
* For Java, Download the NetBeans sample code at Here.
* C++ sample is [Here](https://apiwiki.fxcorporate.com/api/fix/examples/cpp/fix_example.zip)
* C# sample project is [Here](https://apiwiki.fxcorporate.com/api/fix/examples/cs/FIXTradingExample.zip)

# Getting Start:

* Find the config file “quickfixExample.cfg” and replace with your credentials

|  |  |
| --- | --- |
| username=d101970033  password=xxxxx | Replace with your credentials |
| SocketConnectHost=fixdemo2.fxcorporate.com  SocketConnectPort=80  SenderCompID=d101970033\_client1  TargetCompID=FXCM  TargetSubID=U100D1 | Replace with your credentials |

* Run the project in NetBeans. Or run C++/C# projects on Visual Studio.

# Getting Connected:

* There are two ways to Logon, one is within the Logon message should include your Username(553) and Password(554). The other one is send Username(553) and Password(554) on User Request (35=BE). It is also important to note here that FXCM requires the TargetSubID on all messages, including your Logon.

Example Logon Messages

//Send Username/Password on Logon (35=A)

8=FIX.4.4|9=114| 35=A |34=1| 49=fx1294946\_client1| 52=20120927-13:15:34.754| 56=FXCM |57=U100D1| 553=fx1294946| 554=123| 98=0 |108=30 |141=Y| 10=146|

//Send Username/Password on User Request(35=BE)

8=FIX.4.4|9=114|35=BE|34=2|49=fx1294946\_client1|52=20140515-00:29:11.372|56=FXCM|57=U100D1|553=fx1294946|554=1234|923=1|924=1|10=150|

//FXCM Logon response

8=FIX.4.4|9=92| 35=A| 34=1| 49=FXCM| 50=U100D1 |52=20120927-13:15:34.810| 56=fx1294946\_client1| 98=0| 108=30| 141=Y| 10=187|

# Request Live price stream:

* Subscribe market price with 35=V MarketDataRequest. You will get MarketDataSnapshotFullRefresh(W) 35=W. which contains Bid(0), Offer(1), High Price(7), and Low Price(8).

8=FIX.4.4|9=497|35=W|34=4|49=FXCM|50=U100D1|52=20180817-13:44:06.495|56=MD\_d101968187\_client1|55=EUR/JPY|228=1|231=1|460=4|9001=3|9002=0.01|9005=10|9011=0|9020=0|9080=1|9090=0|9091=0|9092=0|9093=0|9094=50000000|9095=1|9096=O|268=4|269=0|270=126.085|271=0|272=20180817|273=13:44:06.000|336=FXCM|625=PSFX|276=A|282=PSFX\_DESK|299=FXCM-EURJPY-19288641|537=1|269=1|270=126.093|271=0|272=20180817|273=13:44:06.000|336=FXCM|625=PSFX|276=A|282=PSFX\_DESK|299=FXCM-EURJPY-19288641|537=1|269=7|270=126.448|269=8|270=125.567|10=117|

* If you want subscribe once and get update been pushed whenever there is update, you need set Subscription request type 263=1 which is snapshot + update. If 0, you will only get one snapshot.
* You can also subscribe security in list, instead of just one security.

8=FIX.4.4|9=134|35=V|34=5|49=d101970033\_client2|52=20180822-19:20:49.137|56=FXCM|57=U100D1|262=4|263=1|264=3|265=0|146=1|55=EUR/USD|267=2|269=0|269=1|10=189|

8=FIX.4.4|9=808|35=V|34=5|49=MD\_d101968187\_client1|52=20180817-13:44:05.840|56=FXCM|57=U100D1|262=4|263=1|264=0|265=0|146=65|55=USOil|55=AUD/JPY|55=NZD/CAD|55=EUR/CAD|55=USD/ZAR|55=AUS200|55=UKOil|55=EUR/NOK|55=NGAS|55=EUR/AUD|55=USD/HKD|55=EUSTX50|55=GBP/CAD|55=USD/CAD|55=GER30|55=CAD/CHF|55=USD/TRY|55=EUR/TRY|55=Copper|55=HKG33|55=USOilF2|55=GBP/AUD|55=NAS100|55=EUR/CHF|55=TRY/JPY|55=AUD/NZD|55=USD/CHF|55=XAU/USD|55=FRA40|55=USOilF|55=AUD/USD|55=NZD/JPY|55=USD/MXN|55=USDOLLAR|55=CHN50|55=ESP35|55=EUR/NZD|55=UKOilF|55=ZAR/JPY|55=GBP/CHF|55=NZD/USD|55=USD/JPY|55=GBP/NZD|55=SPX500|55=CHF/JPY|55=UK100|55=EUR/USD|55=SOYF|55=GBP/USD|55=EUR/JPY|55=AUD/CHF|55=EUR/GBP|55=XAG/USD|55=US30|55=GBP/JPY|55=NZD/CHF|55=USD/NOK|55=CAD/JPY|55=AUD/CAD|55=Bund|55=USD/SEK|55=EUR/SEK|55=USD/CNH|55=JPN225|55=UKOilF2|267=2|269=0|269=1|10=004|

# Retrieve Account/Open/Close table information:

* Send Collateral Inquiry 35=BB, you will get Collateral report 35=BA, which contains account information.

8=FIX.4.4|9=88|35=BB|34=4|49=d101970033\_client2|52=20180817-20:17:27.716|56=FXCM|57=U100D1|263=1|909=3|10=203|

8=FIX.4.4|9=361|35=BA|34=5|49=FXCM|50=U100D1|52=20180817-20:17:27.737|56=d101970033\_client2|1=01960313|53=1000|336=FXCM|625=U100D1|898=0|901=1000562.37|908=4647057334|909=3|910=0|911=1|912=Y|921=1000562.37|922=1000562.37|9038=0|9045=N|9046=0|9047=0|453=1|448=FXCM ID|447=D|452=3|802=5|523=1960313|803=10|523=d101970033|803=2|523=fix-test138|803=22|523=32|803=26|523=Y|803=4000|10=033|

* For Open positions, send Request for positions 35=AN with 724=0 (positions). You will get position report 35=AP for each open position. If you don’t have open position, you will get “No open positions” in message 35=AO.

Sample for open positions request:

8=FIX.4.4|9=149|35=AN|34=5|49=d101968168\_client1|52=20151111-21:01:12.396|56=FXCM|57=U100D1|1=01958448|60=20151111-21:01:12.395|263=1|581=6|710=4|715=20151111|724=0|10=085|

Sample for open position.

8=FIX.4.4|9=565|35=AP|34=8|49=FXCM|50=U100D1|52=20151111-20:19:59.929|56=d101968168\_client1|1=01958448|11=FIX.4.4:d101968168\_client1->FXCM/U100D1-1437981786837-10|15=EUR|37=207486895|55=EUR/USD|60=20150727-07:23:08|325=N|336=FXCM|526=fix\_example\_test|581=6|625=U100D1|710=4|715=20151111|721=3684204026|724=0|727=2|728=0|730=1.10728|731=1|734=0|912=N|9000=1|9038=260|9040=-21.16|9041=80775478|9042=20150727-07:23:08|9053=0.8|453=1|448=FXCM ID|447=D|452=3|802=4|523=32|803=26|523=d101968168|803=2|523=fix-test112|803=22|523=1958448|803=10|702=1|703=TQ|704=10000|753=1|707=CASH|708=0|10=137|

* For closed positions, please send positions request 35=AN with 724=1 (Trades). You will receive position report in 35=AP

Sample for closed positions request:

8=FIX.4.4|9=177|35=AN|34=6|49=d101968168\_client1|52=20151111-21:01:12.400|56=FXCM|57=U100D1|1=01958448|60=20151111-21:01:12.400|263=1|581=6|710=5|715=20151111|724=1|9012=20150311|9014=20151112|10=110|

Sample for closed position.

8=FIX.4.4|9=702|35=AP|34=20|49=FXCM|50=U100D1|52=20151111-21:01:11.936|56=d101968168\_client1|1=01958448|11=FIX.4.4:d101968168\_client1->FXCM/U100D1-1428599035518-4|15=EUR|37=202027586|55=EUR/USD|60=20150519-03:30:43|325=N|336=FXCM|526=fix\_example\_test|581=6|625=U100D1|710=5|715=20151111|721=3533878441|724=1|727=13|728=0|730=1.06572|731=1|734=0|912=Y|9000=1|9040=-6.08|9041=78911063|9042=20150409-17:03:56|9043=1.12979|9044=20150519-03:30:43|9048=U100D1\_16679142D2EE08ABE053142B3C0A452A\_05192015032653174913\_QCV-127|9049=FXTS|9052=640.7|9053=0.8|9054=204437509|453=1|448=FXCM ID|447=D|452=3|802=4|523=32|803=26|523=d101968168|803=2|523=fix-test112|803=22|523=1958448|803=10|702=1|703=TQ|704=10000|753=1|707=CASH|708=0|10=042|

# Place Market Order:

* Place market order via 35=D. you will get execution report in 35=8

Open market position:

20160411-06:16:50.909 : 8=FIX.4.4 9=163 35=D 34=7 49=D101546502001\_client1 52=20160411-06:16:50.909 56=FXCM 57=U100D1 1=01537581 11=635959630109097564 38=10 40=1 54=1 55=SPX500 59=1 60=20160411-06:16:50 10=054

Sample execution report 35=8

20160411-06:16:51.399 : 8=FIX.4.4 9=478 35=8 34=15 49=FXCM 50=U100D1 52=20160411-06:16:51.177 56=D101546502001\_client1 1=01537581 6=2047.53 11=635959630109097564 14=10 15=USD 17=821172034 31=2047.53 32=10 37=225909074 38=10 39=2 40=1 44=2047.53 54=1 55=SPX500 58=Executed 59=1 60=20160411-06:16:51 99=0 150=F 151=0 211=0 336=FXCM 625=U100D1 835=0 836=0 1094=0 9000=1010 9041=89603919 9050=OM 9051=F 9061=0 453=1 448=FXCM ID 447=D 452=3 802=4 523=1537581 803=10 523=d101546502001 803=2 523=Halpert 803=22 523=32 803=26 10=088