**FIX API** is a **messaging protocol** widely **used in the** **electronic trading** industry.

It is by no means exclusive to forex trading. In fact, FIX API is used by stock, metals, futures, and options exchanges. It’s used by Tier-1 banks, all the way down to retail forex brokers, and even by retail traders.

**FIX** is an acronym for The **Financial Information eXchange (FIX)** effort, initiated in 1992.

**Clients and brokers** use software called **FIX engines to connect** using the **FIX protocol**. In order to begin a FIX session, Client A and Broker B connect their engines at a predetermined start time using a predetermined host and comp ID.

FIX API is a **non-proprietary, free, and open protocol** owned by a UK non-profit entity, FIX Protocol Ltd.

The protocol was originally created to support equities trading and to replace phone trading in the early 90s. Since then, the technology has been extended significantly and is being used by thousands of electronic trading companies around the world.

## **Advantages of FIX API**

The main primary advantages are as follows :

**Conformance.** FIX is **extensive and covers an array of securities**. Not every user of FIX uses 100% of the available messages. Usually, a broker or exchange will publish rules of engagement on how messages are used.

**Speed.** FIX **messages were designed to be lean**. This means they can **travel fast** and **do not require much bandwidth to transmit**. This is ideal because FIX messages are usually sent at high frequencies.

**Support for multiple brokers.** You **can establish FIX sessions** **with multiple brokers** simultaneously to observe trading conditions such as spreads and liquidity and find opportunities across a wider playing field.

**Convenience.** Trading system **developers can employ practically any programming language** that **supports socket communication**.

## **Limitations of FIX API**

The **FIX API provides a fixed, inextensible array of transaction types** that system developers must abide by, all geared towards **two main categories of exchange**:

1. **Real-Time Market Data**
2. **Order Execution & Management**

FIX **does not permit traders** to **query any specifics regarding their actual trading account**, such as Equity, Balance, Available Margin, Open/Closed Orders, etc.

FIX **does not permit** the **acquisition of historical market data**, only **real-time**.

## 

## **How Does FIX API Work**

When you **trade forex**, usually you **do it through a platform** provided by your broker. For example MetaTrader 4, MetaTrader 5, or cTrader.

However, when you **trade through FIX API**, there is **no platform to work with**. You need to somehow build your own platform, interface, or algorithm to send instructions to and listen to information from the FIX API.

Several FIX engines exist today that greatly reduce the time developers spend creating transfer logic, leaving them to focus more on application and trading logic.

This is what a **logon message** in **FIX API** looks like:

***8=FIX.4.4****|9=126|****35=A****|34=1|49=theBroker.12345|57=TRADE|50=any\_string|52=20170117-08:03:04|56=CSERVER|98=0|108=30|553=12345|554=passw0rd!|10=131|*

35=R - Quote Request

35=S - Quote

35=AI - Quote Ack

35=AJ - Quote Reject

35=8 - Execution Report