

## 10 frequently asked questions

**Does the Object+ FIX Gateway give access to functions that are not in FIX, but are offered by a specific electronic trading system?**

Yes. If required the interface is extended by Object+ (in ways allowed by the FIX standard) to make these functions accessible.

**How can Object+ claim to support truly universal FIX while at the same time making extensions to it?**

The fact is that the interface exposed by the Gateway consists of a truly universal core, and optional extensions. The core functions of the interface are fully compliant with the official FIX standard, and the extensions are designed in the most generic way possible. Each Gateway provides a way for the business application to query which extended interfaces are supported and which functions are actually implemented. So if the business application only uses the core functions, it can remain fully unaware of the specific features of the trading system it connects to. If it does need the system-specific features, it can use the extensions in an orderly manner by first finding out (at run time) which interfaces are actually supported.

**Suppose I have written one business application that connects, via the Gateway to the Eurex exchange. I want to connect the same application to Instinet. What steps would be involved?**

If your application only uses core functions, you must adapt some minor issues, like the user id and password provided in the Logon. 99% of the application can probably be used straight away. When extended functions are used, the program will have to be adjusted for use with Instinet. However, as the application can easily find out at run time which extensions are supported by the Gateway, you can still end up with one program that uses either trading system.

**How do you deal with functions not offered by an electronic trading system? Do you still try to implement them in the Gateway?**

If the function can be added we normally do. For example, if a trading system offers a real time trade stream, but does not offer a function to query historic trades, we add a trade data store in the Gateway in order to fully implement the FIX "Street Side Trade Capture Reporting" function.

**What happens if the electronic trading system releases a new version of its connection software?**

In such a cases Object+ releases a new version of the Gateway, which takes care of any changes in the mapping between FIX and the electronic trading system. So the business applications that use the Gateway need no maintenance, unless they use trading system specific data that are affected by the upgrade (for example when an exchange introduces a new type of product).

**What happens if the FIX committee releases a new version of the protocol, in which for example features that used to be an extension are now part of the "official" standard?**

In that case a Gateway will be released that supports the new FIX standard, but will remain reverse compatible with the "old" interface. This means that newly developed business applications can be based on the new FIX standard, while existing applications continue to run without change.

**Must the business application take care of FIX message encoding and decoding?**

No, the details of FIX message encoding / decoding, as well as all FIX session level handling, syntactic message validation and message transfer are dealt with in the Object+ FIXAPI library, which forms part of the Gateway. The business application can concentrate on the real business issues.

**Can a business application connect to multiple Gateways at the same time?**

Yes, this is fully supported by FIXAPI.

**Which platforms and development environments are supported?**

The Gateway Translator is an application that can be deployed on Microsoft Windows or Sun Solaris (note that the electronic trading system might impose additional requirements). It communicates with the business application over a TCP/IP connection. The business application can either be developed in C++ (for Windows or Sun Solaris) or in Visual Basic 6.0 (Windows only).

**What is the performance penalty imposed by the Gateway (as opposed to connecting to the electronic trading system directly)?**

It will be clear that the translation between FIX and the native model of the trading system consumes system resources, mainly CPU time. The overall message throughput depends on the capacity of the machine and other processes running on the same machine, but experience shows that several thousands of messages can be handled per second, with a very low latency per message.

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## Universal FIX Gateway

one plug to world-wide exchanges

- Reduce your time to connect
- Decrease your costs through standardisation
- Control costs with fixed fee pricing model
- Comprehensive exchange service program



# Universal FIX Gateway

## one plug to world-wide exchanges

### Introduction

Trading access to the world exchanges is increasing ... and so are the costs of getting connected.

Each exchange has its own interface. Banks, brokers, dealers, clearing members and software vendors who need to connect to exchanges around the globe are facing the same problems, i.e.:

- A diversity of exchange interfaces
- A variety of upgrade schedules
- Unforeseen maintenance
- Adding new functionalities
- Lack of standardisation

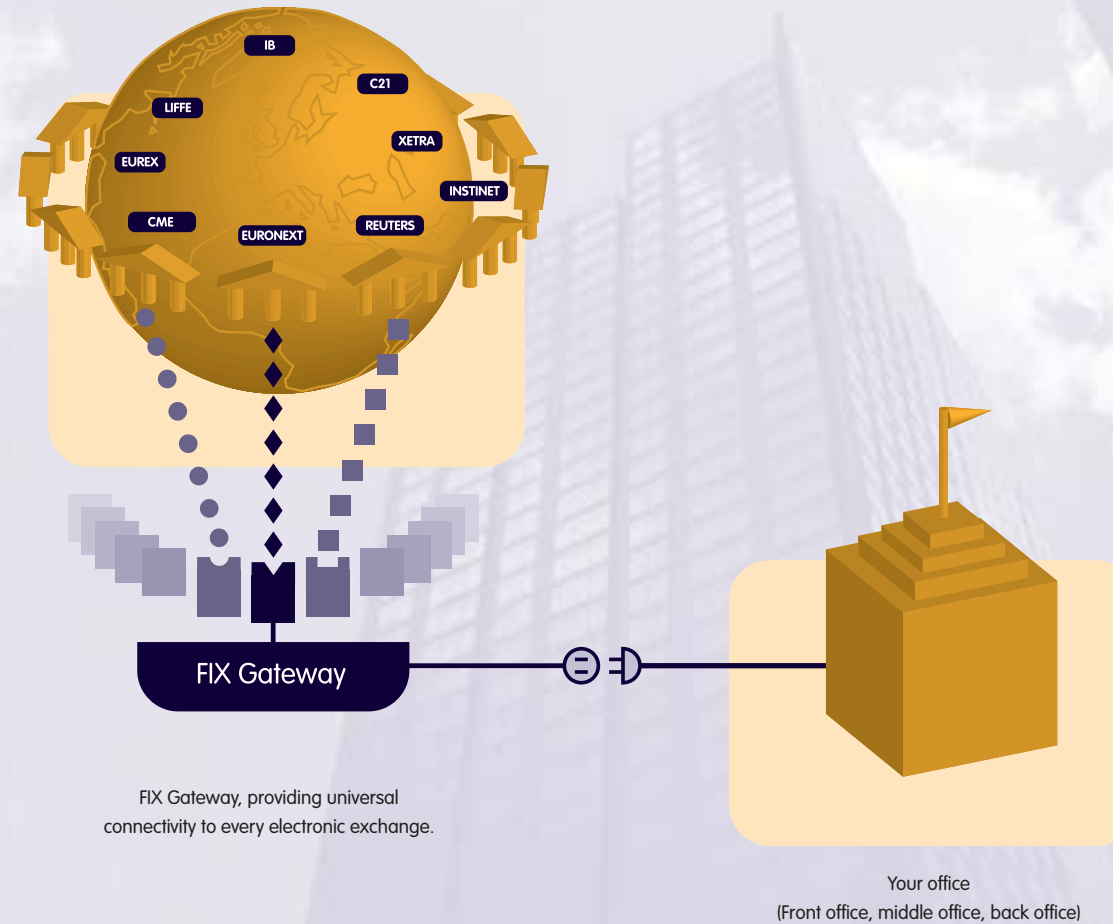
all leading to high, uncontrollable IT costs and a heavy burden on valuable resources.

The Universal FIX Gateway has been especially developed to control your development and maintenance costs by offering standardisation in connectivity.

Thanks to the Universal FIX Gateway it is no longer necessary to waste time and money on getting to know the exchange interface specifications.

Object+ offers one plug to the world wide exchanges, simple and cost effective, allowing you to achieve more turnover in less time.

Exchanges Brokers Data vendors



FIX Gateway, providing universal connectivity to every electronic exchange.

### What is the Universal FIX Gateway?

The basic concept of the Universal FIX Gateway consists of mapping the business models of the different electronic trading systems onto one universal business model. Therefore, in-house applications need not be aware of the specifics of each electronic trading system. The universal business model can handle any functionality offered by an exchange, broker or data vendor.

**Conclusion:** You concentrate on your core business, we facilitate the communication with your markets.

**Our Mission:** to provide our customers with universal connectivity to communicate with exchanges, brokers, and data vendors world wide through reliable, flexible and cost effective interfaces.

- Reliable
  - Proven technology based on over 30 man-years of FIX experience
  - Strong customer base including industry leading banks and exchanges
  - Developed for high volume customers
- Flexible
  - Base functionalities open for extensions on demand
  - Specific FIX supported functionalities are added on demand
  - Fit for purpose
- Cost effective
  - Base functionalities offered at fixed rates
  - Additional functionalities also offered at a fixed fee
  - Minimum maintenance costs

## Advantages

### Advantages for General management

- Reduce your time to connect
- Cost reductions through standardisation
- Focus on your core business
- Simplify your organisational infrastructure
- Reduces development & upgrading costs
- Fixed fee for new connections
- Fixed fee for maintenance
- Sound investment

### Advantages for IT management

- One universal FIX gateway to all your applications
- Exchange updates have no impact on existing applications
- Functionality on demand
- No need to reinvent the wheel
- Control your IT budget
- No variable project costs
- No training costs

### Advantages for developers

- Concentrate on one business model
- Dealing with one set of documentation – FIX
- Availability of testing tools

### Object+ added value

- Exchange experience and knowledge
- Clearing, trading and risk management knowledge
- FIX specialists
- Comprehensive Exchange service program

For more information  
please refer to  
[www.objectplus.nl](http://www.objectplus.nl)