# FIX Antenna C++

## B2BITS\_



FIX Antenna™ C++ is specifically designed to deliver high performance. It can deliver over 60,000 messages per second on a single CPU and has been benchmarked at 30,000 messages per second across 200 sessions. This level of performance means it is an ideal solution for exchanges, sell sides and program trading operations. FIX Antenna C++ FIX engine is currently deployed in some of the most demanding environments in the world.

FIX Antenna C++ FIX engine is not purely a performance engine. It has a rich feature set to support the variety of requirements that a FIX engine must fulfill. It supports FIX 4.0, 4.1, 4.2, 4.3, 4.4, 5.0, 5.0 SP1, 5.0 SP2 and FAST. Furthermore, it does not require a database, thus providing additional cost savings.

All libraries/servers are <u>pre-configured for and certified with multiple exchanges</u>, including CME, ICE, INET and many others.

#### **Feature**

### Description

#### High performance / low latency

The highest performing FIX engine in existence.

Delivers over 60,000 messages per second.

Benchmarked at **30,000** messages per second across 200 sessions.

Adds up to 22 microseconds' latency on 100 Mbps network with persistence and 14 microseconds' latency on 100 Mbps network without persistence.

Allows configuring sending/receiving prioritization for session.

In transient mode it can deliver over **115000** messages per second

Please refer to the latest benchmarks of FIX Antenna C++, Windows- and Linux-based.

#### 100% FIX standard compliance

- · All versions of FIX protocol are supported:
  - FIX 4.0, 4.1, 4.2, 4.3, 4.4, 5.0, 5.0 SP1, 5.0 SP2
  - $\bullet \ \ \mathsf{FIXML} \ 4.1 4.4, \ 5.0, \ 5.0 \ \mathsf{SP1} \\$
  - FAST 1.1
- · All asset classes
- Standard FIX protocol extensions:
  - User-defined tags
  - User-defined message types
- Validation

#### Rich message composition API

Supports two message composition APIs:

- Flat model simple and fast
- Object model typified message API, which allows working with FIX business objects as with classes and class members

#### **FIX protocol customization**

Ability to change standard FIX protocol:

- Change tag's "required" attribute
- Remove field from set of "defined" fields
- · Define new message type

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Feature	Description
Guaranteed delivery	Fully supports all FIX session level mechanisms, such as heart-beating, sequence number maintenance, automatic reconnect, gap fill, etc.  FIX Antenna implementation is based on <b>store-and-forward</b> mechanism, which prevents messages from being lost; the <b>persistent</b> mode prevents message from being lost even after software failure
Customizable FIX session level	Provides flexible mechanism for session level customization such as smart sequence number handling, controlled retransmissions, authorization, etc.
Rejecting vs. later delivery	Each FIX session individually can be configured for later delivery mode or for rejecting mode. Rejecting mode allows specifying message time-to-live, after which message is rejected
High availability	Fully restores its state after failure
Back-up connections	Each FIX session can be configured to have back-up connection parameters; automatic and manual switches are supported
Market Data	Ready for Market Data distribution:  Transient session with extremely low latency and high throughput  FAST
Security	Supports all standard FIX encryptions modes, provides SSL tunneling
Remote administration interface	Provides a set of monitoring and administration functions. Comes with AdminApplication class, which can be inherited and extended
Well packaged	FIX Antenna is delivered with:  Precompiled binaries for chosen platform  API Guide  Programmer's Guide with code examples  Set of primitive "quick start" samples  Set of utilities with sources  Benchmark tools with sources  FIXEye and FIXGrep FIX log Analyzers  FIXICC monitoring tool  Handy installer
Supported platforms	Supported OS:  • Windows, Linux, Solaris  • 32 and 64 bit architecture Supported compilers:  • GCC  • MS Visual Studio 2003/2005/2008

B2BITS FIX engines come at a fixed annual cost. There are NO additional charges, no message fees, no message limits, no charges for each processor, no charge for different operating systems, no charge for high availability, no charge for routing capability, no charge for persistent storage.