



# FIX Antenna™

FIX Antenna™ is the highest performing FIX engine supporting all FIX versions (4.0 - 5.0 SP2), FIXML and FAST. It is pre-configured for and certified with multiple exchanges. With FIX Engine's ability to process over 100,000 messages per second on a single CPU, you no longer need a big expensive infrastructure to handle the most challenging market conditions. High availability is included as a standard.



## USA

### **Newtown** / Global Headquarter

41 University Drive, Suite 202,  
Newtown, PA 18940,  
Phone: +1-267-759-900

## UK

### **London**

10 Albemarle Street,  
London, W1S 4HH,  
Phone: +44-20-7758-9830

## DE

### **Frankfurt am Main**

Mainzer Landstrasse 49/49A  
D-60329 Frankfurt am Main  
Phone: +49-69-3085-5074

## RU

### **Moscow**

9th Radialnaya Street, Building 2  
Moscow, 115404  
Phone: +7-495-730-6360

## HU

### **Budapest**

Corvin Offices I. Futó street 47-53  
Budapest, H-1082  
Phone: +36-1-327-7400

Feature	Description
Supported languages	<ul style="list-style-type: none"> <li>• C++ / .NET / Java</li> </ul>
High performance / low latency	<ul style="list-style-type: none"> <li>• Delivers over <b>60,000 messages per second</b> with persistence and over <b>150,000 messages per second</b> without persistence</li> <li>• Adds <b>11 microseconds</b> to latency in average for sending messages and up to <b>4 microseconds</b> to latency in average for reading with persistence</li> <li>• Adds up to 1microsecond to latency in average for sending message</li> </ul>
Supports standard FIX	<ul style="list-style-type: none"> <li>• 100% FIX standard compliance (FIX 4.0- 5.0 SP2)</li> <li>• FAST 1.1, 2.0</li> <li>• Customizable FIX protocol. Create your own FIX dialect e.g. change extra field for a message, change “required” attribute, etc. in a friendly XML format</li> <li>• Multiple sessions management <ul style="list-style-type: none"> <li>- Supports up to 200 concurrent sessions on a single instance on recommended hardware. Each session can be configured separately</li> </ul> </li> <li>• Guaranteed delivery <ul style="list-style-type: none"> <li>- Relies on the store and forward technique</li> <li>- Flat files are used for persistence to achieve maximum performance</li> </ul> </li> <li>• Standard FIX routing based on DeliverTo and OnBehalfOf fields</li> </ul>
Example of certified FAST connections	<ul style="list-style-type: none"> <li>• BM&amp;F BOVESPA</li> <li>• CME FIX/FAST Market Data</li> <li>• CQG</li> <li>• Eurex</li> <li>• Full list is available at: <a href="http://www.b2bits.com/consulting/hosting.html">http://www.b2bits.com/consulting/hosting.html</a></li> </ul>
FIXML converter	<ul style="list-style-type: none"> <li>• FIX↔FIXML converter compatible with FIX 4.0 - 5.0 SP2</li> </ul>
Delivery modes	<ul style="list-style-type: none"> <li>• Later delivery mode allows unsent messages to be stored in queue and delivered later when connection is re-established</li> <li>• Rejecting mode allows messages, which cannot be sent during some reasonable time (customizable), to be rejected.</li> </ul>
Highly customizable FIX session level	<ul style="list-style-type: none"> <li>• Highly customizable logic of messages processing <ul style="list-style-type: none"> <li>- Ability to create custom handler for any type of message</li> <li>- Ability to add custom pre-processing of messages before they will be handled by FIX Antenna</li> </ul> </li> </ul>
Reliability vs. performance	<ul style="list-style-type: none"> <li>• Supports transient sessions, which do not use any persistence. This significantly increases performance giving up recovery.</li> <li>• Ability to use different types of storages. This allows maintaining balance between reliability and performance.</li> </ul>
Performance tuning	<ul style="list-style-type: none"> <li>• Ability to enable or disable Nagle’s algorithm to minimize latency or maximize throughput</li> <li>• Ability to manipulate the internal queue size to get maximum throughput (process messages in batch) or lower latency (minimal time in queue)</li> <li>• Ability to use different levels of message validation to balance between reasonable correctness and good performance</li> <li>• Ability to build template message and send it many times with different values. Sending of such prepared messages will be faster in most cases.</li> <li>• Ability to choose sending mode. Synchronous sending gives lower latency, but asynchronous is preferable for getting a better throughput</li> </ul>
Monitoring and administration	<ul style="list-style-type: none"> <li>• Built-in remote monitoring and administrative interface for sessions monitoring and management</li> <li>• Public API to override and/or extend existing administrative instructions</li> <li>• Rich monitoring and administration GUI out of the box</li> </ul>
Rich message composition API	<ul style="list-style-type: none"> <li>• FIX flat message model — generic model to work with the abstract FIXMessage class via fields and groups getters and setters, which gives the highest performance</li> <li>• FIX object model — each FIX message type is a class with FIX fields as members, using intellisense to make working with FIX business object more pleasant</li> <li>• Prepared messages - message template for faster sending messages with the same structure but with different values</li> </ul>
Scheduler	<ul style="list-style-type: none"> <li>• FIX Antenna Java allows scheduling session start/stop action using syntax similar to UNIX cron daemon</li> </ul>
Security	<ul style="list-style-type: none"> <li>• SSL tunneling for transport</li> <li>• Standard FIX authorization utilizing username and password fields in FIX Logon message</li> <li>• Strategies auto-accepting or Auto-declining non pre-configured incoming sessions</li> </ul>
Supported accelerated TCP/IP stack	<ul style="list-style-type: none"> <li>• Myricom (FastStack™ DBL™ for Linux and Windows™), Solraflare (OpenOnload®) NICs</li> </ul>
Supported environments	<div>Supported OS</div> <ul style="list-style-type: none"> <li>• Windows, Linux, Solaris</li> </ul> <div>Supported compilers</div> <ul style="list-style-type: none"> <li>• GCC 4.1.x / MS Visual Studio 2005, 2008, 2010/ .NET Framework 2.0 - 4.0 /JDK 1.5 and above</li> </ul>
Product support options	<ul style="list-style-type: none"> <li>• Worldwide (provided online, via phone or email)</li> <li>• Business hours / 24x5 /24x7</li> </ul>

On Demand software escrow via NCC Group (<http://www.nccgroup.com/>)