GlobalFIX

Release Bulletin

Version 6.0

Table of Contents

1. Accessing current release bulletin information

A more recent version of this release bulletin may be available from Product Support. Please refer to "Technical Support" or your License Agreement for details on contacting customer support.

Please refer to the product readme file for any last-minute changes or important information that may affect installation or use of the product.

2. Product summary

Enclosed is Financial Fusion TradeForce Suite GlobalFIX and GlobalFIX Lite.

Please refer to the *GlobalFIX Feature Guide* for details on components and features of version 6.0 of GlobalFIX and GlobalFIX Lite.

Hardware and software requirements

Operating system: Windows 2003, Windows XP Professional, Solaris 9, Solaris 10, or HP-UX 11i.

Minimum memory (RAM):

- GlobalFIX (512 MB)
- Message Broker (256 MB)
- Universal Alerts Engine (10 MB)

Minimum disk space (typical installation):

- GlobalFIX (400 MB)
- Message Broker (25 MB)
- Universal Alerts Engine (10 MB)

Application server: WebLogic 8.1 (SP 5), Enterprise Application Server (EAServer) 5.0, or EAServer 5.5.

JRE: Sun Java™ Run-time Environment (JRE) 1.4.2

Database server: Adaptive Server Anywhere (ASA) 9 (with jConnect 5.5), Adaptive Server Enterprise (ASE) 12.5.3, or Oracle Database Server 9.2.0.1.0.

3. Special installation instructions

Please refer to the *GlobalFIX Installation and Configuration Guide* for detailed installation instructions. Please refer to the product readme file for any last-minute changes or important information that may affect installation or use of the product.

Installation CD directory structure

The directory structure for the GlobalFIX 6.0 installation CD consists of:

- This release bulletin, which provides any last-minute changes or important information that may affect installation or use of the product.

- Third-party license agreement. Stipulates the conditions under which third-party licenses are granted.

- /docs. Contains:

    o GlobalFIX Installation and Configuration Guide

    o GlobalFIX Developer's Guide and API Reference

    o GlobalFIX Feature Guide

    o GlobalFIX Quick Start Guide

    o Message Broker Developer's Guide and API Reference

    o Message Broker Installation and Configuration Guide

    o Universal Alerts Engine Developer's Guide and API Reference

    o Universal Alerts Engine Feature Guide

- /install. Contains the GlobalFIX and GlobalFIX Lite installation programs. The installation requires a valid license key.

Installation notes

GlobalFIX:

1. The JMS Adapter is supported on the Windows and Solaris platforms only.

GlobalFIX Lite:

1. Before running the GlobalFIX Lite Server, set **FFSINSTALLDIR** as a global environment variable pointing to the GlobalFIX Lite installation location.

2. Before compiling any GlobalFIX Lite Java program, make sure JDK 1.4.2 is installed and **FFSJDKDIR** is set as a global environment variable pointing to the JDK 1.4.2 installation location.

3. When deploying a bean into JBoss using the **build.bat** (for Windows) or **build.sh** (for Solaris) utility, use:

> **%FFSINSTALLDIR%\FIX\bin\build.bat** (For Windows)
>
> **$FFSINSTALLDIR/FIX/bin/build.sh** (For Solaris)

Example: Deploying a customized FIX41CallbackBean (For Windows)

- Copy the customized FIX41CallbackBean Java program to **%FFSINSTALLDIR%\FIX\api\com\ffusion\msgbroker\generated\MessageBroke r\api\FIX41\Callback**.

- Add all libraries required by the customized FIX41CallbackBean to MYCLASSPATH of **build.bat**.

- From the command line, navigate to the **%FFSINSTALLDIR%\FIX\bin** directory and execute: **build.bat FIX41 Callback**

Example: Deploying a customized FIX41CallbackBean (For Solaris)

i. Copy the customized FIX41CallbackBean Java program to **$FFSINSTALLDIR/FIX/api/com/ffusion/msgbroker/generated/MessageBroker /api/FIX41/Callback**.

ii. Add all libraries required by the customized FIX41CallbackBean to MYCLASSPATH of **build.sh**.

iii. From the command line, navigate to the **$FFSINSTALLDIR/FIX/bin** directory and execute: **build.sh FIX41 Callback**

4. New and changed functionality in this version

GlobalFIX 6.0 provides the following new features and enhancements:

- Reporting: The new reporting server (GRS server) enables users to generate business and operational reports. Operational reports provide FIX administrators with information on the number of messages GlobalFIX is processing at the server and session levels. Business reports provide business users or sales managers overview status on the orders (buy, sell, rejected, and so on) processed through the gateway.

- Support for Chinese Securities Trading Exchange Protocols (STEP) 1.0: GlobalFIX 6.0 supports the new STEP protocol through message format changes and session-level modifications.

- Clustering Enhancements: In previous versions, GlobalFIX clusters only reconnected sessions in fail-over situations when the connection was initiated by a counter party. In version 6.0, GlobalFIX also reconnects sessions for which it (GlobalFIX) initiated the connection. In addition, fail-over time has been reduced from previous versions.

- Universal Alerts Engine Integration: GlobalFIX 6.0 features tighter integration with the Universal Alerts Engine (UAE), enabling you to:

  - Administer the UAE cluster from the GlobalFIX user interface

  - Schedule automatic end-of-day (EOD) processing for sessions

  - Send e-mail alerts to notify users of events such as:
    - Session disconnection/reconnection
    - EOD processing completion
    - JMS Adapter errors

- JMS Adapter: GlobalFIX 6.0 introduces the JMS Adapter as the new standard message adapter, replacing the existing MQ adapters.

- User Interface Cleanup and Enhancements: The user interface (UI) no longer requires the use of popup dialogs and multiple panes for setting properties. Instead, the UI uses a tree hierarchy to display a list of properties on the left side of the screen. When you select a property in the tree, you can set attributes for the property on the right side of the screen. In addition, the UI now enables you to filter and search the audit and message log views.

5. Known problems

The following issues are known to exist within GlobalFIX and GlobalFIX Lite. Where applicable, issue descriptions contain information on workarounds. For the most up-to-date list of known issues, consult the readme file packaged with GlobalFIX and GlobalFIX Lite.

GlobalFIX:

1. WebLogic ships with a previous version of the Sybase jConnect database driver. GlobalFIX 6.0 includes up-to-date jConnect drivers. To avoid a memory leak when using the WebLogic application server, update the start scripts to have the latest jConnect drivers occur before the WebLogic components in the Java classpath.

To update the start scripts on Windows, shut down your GlobalFIX servers and perform the following:

i. Update %FFSINSTALLDIR%\FIX\bin\startweblogicfix.cmd, by changing the line

```
set CLASSPATH=.;%wl_cp%;%mb_cp%;%fix_cp%;%fixcallback_cp%;%jconnect%;%uae%
```

to

```
set CLASSPATH=.;%jconnect%;%wl_cp%;%mb_cp%;%fix_cp%;%fixcallback_cp%;%uae%
```

ii. Update both %FFSINSTALLDIR%\FIXDemo\bin\startWebLogicfixDemoBuy.cmd and %FFSINSTALLDIR%\FIXDemo\bin\startWebLogicfixDemoSell.cmd by changing the line

```
set CLASSPATH=.;%wl_cp%;%mb_cp%;%fix_cp%;%fixcallback_cp%;%fixsend_cp%;
%jconnect%;%uae_cp%
```

to

```
set CLASSPATH=.;%jconnect%;%wl_cp%;%mb_cp%;%fix_cp%;%fixcallback_cp%;
%fixsend_cp%;%uae_cp%
```

iii. After updating the start scripts, restart your GlobalFIX servers.

To update the start scripts on Solaris/HP-UX, shut down your GlobalFIX servers and perform the following:

i. Update $FFSINSTALLDIR/FIX/bin/startWebLogicfix.sh by changing the line

```
CLASSPATH=$fix:$mb:$weblogic:$fixcallback:$jconnect::$UAECLASSPATH
```

to

```
CLASSPATH=$fix:$mb:$jconnect:$weblogic:$fixcallback::$UAECLASSPATH
```

ii. Update $FFINSTALLDIR/FIXDemo/bin/startWebLogicfix.sh by changing the line

```
CLASSPATH=$fix:$mb:$weblogic:$fixcallback:$fixsend:$jconnect:$uae
```

to

```
CLASSPATH=$fix:$mb:$jconnect:$weblogic:$fixcallback:$fixsend:$uae
```

iii. After updating the start scripts, restart your GlobalFIX servers.

2. Known issue with a C++ client connecting to the GlobalFIX EJBs.

    Workaround: Use the C++ lightweight API (LWAPI), which is supported on multiple application servers. For more information on C++ connectivity to EJB, contact the Sybase EAServer support team.

3. The DetailedMsgView DBAccess APIs do not work if the GlobalFIX server is configured to use file-based logging.

4. Due to the enumeration member name changes in the FIX40-44 message sets, complete the following if you want to work with previous releases of GlobalFIX:

    i. To upgrade the FIX40-44 message sets in the MBFFS database, redeploy the FIX40-44 message sets using:

        `%FFSINSTALLDIR%\FIX\xmls\FIX4X.xml` (For Windows)

        `$FFSINSTALLDIR/FIX/xmls/FIX4X.xml` (For Solaris)

    ii. Update the FIX4X sending client programs. If the client program refers to the enumeration members by name, some changes are required. If the client program accesses the enumeration members by their value or index, then no change is needed. Using the FIX43 "Side" enumeration as an example, no change is required if the program calls

        ```
        EnumSide enumInstance = EnumSide.from_int( ValueSetSide.getIndex( "1" ) );
        ```

        If the program calls `EnumSide enumInstance = EnumSide.Buy;`, change `EnumSide.Buy` to `EnumSide.Sid_Buy`.

5. The FIXDemo SendOrder sample will not work if the user has installed the AlertDisconnect sample into the FIXDemo Servers.

    Workaround: Uninstall the AlertDisconnect sample by running the uninstall script located at `$FFSINSTALLDIR/FIXDemo/samples/AlertDisconnect`. Restart the FIX Demo Application Servers.

6. The Reuters Exchange Mnemonics listed in Appendix C of the FIX 4.0 and 4.1 Protocol specifications have naming collisions (for example: Swiss Options and Financial Futures Exchange and Zurich Stock Exchange both use 'Z'). The GlobalFIX Server cannot correctly deduce the correct exchange for these collisions and defaults to interpreting the mnemonic as representative of the exchange which appears later in the list.

7. For a session with Auto Reconnect enabled, the GlobalFIX server reports that it is attempting to reconnect before it actually tries to reconnect.

8. Deleting a session does not delete the message log data for that session. As a result, message log data can be retrieved for a session that does not exist. Also, if a session with message log data is deleted and is then recreated, the old message log data is associated with the recreated session.

Because of this issue, the DetailedMsgView sample fails if message log data exists for a deleted session.

Workaround: Perform an end-of-day operation on the session prior to deleting it.

9. When using the C++ LW API, if the GlobalFIX server disconnects an LW Connection because the LW Connection timeout has been reached, the client could enter an infinite loop at 100% CPU utilization.

Workaround: Disable the LW API timeout by setting the value to zero in the GlobalFIX Server configuration.

10. An issue on HP-UX PA-RISC causes the FIX Server to crash when using EAServer 5.0.

Workaround: Navigate to the `$JAGUAR/Repository/Server` directory (for example, `/sybase/EAServer/Repository/Server`) and add the following property to the `FIXServer.props` file:

```
com.sybase.jaguar.server.jvm14.options=-XX:+AllowUserSignalHandlers
```

When you have updated the properties file, restart the FIX server.

GlobalFIX Lite:

1. A suspected memory leak in WebLogic on Solaris causes increased memory usage over time until all memory is consumed. This issue is currently under investigation.

2. The Session Refresh menu item in the Financial Fusion Management Console does not refresh the session in the GlobalFIX Lite server's memory.

Workaround: Use the AdminCommand sample to refresh the session.

3. The DetailedMsgView feature does not work if the server is configured to use file-based logging.

4. Due to the message definition changes from FIX4.2 to FIX4.2Errata, in conjunction with the Message Broker logon message structure change in the FIX4.2Errata message set, the following message types are not supported for the logon message:

- 372 RefMsgType
- 384 NoMsgTypes
- 385 MsgDirection

Additionally, when connecting sessions configured with the FIX4.2Errata protocol, a NoSuchFieldException exception will be thrown twice. These exceptions can be ignored.

5. The Reuters Exchange Mnemonics listed in Appendix C of the FIX 4.0 and 4.1 Protocol specification have naming collisions (for example, Swiss Options and Financial Futures Exchange and Zurich Stock Exchange both use 'Z'). The GlobalFIX Lite Server cannot correctly deduce the correct exchange for these collisions and defaults to interpreting the mnemonic as representative of the exchange which appears later in the list.

6. Fixed problems

Not applicable. This is a new release of GlobalFIX.

7. Product compatibilities

There are no known product compatibility issues. See "Product Summary" for details on hardware and software prerequisites for this product.

8. Documentation updates and clarifications

At the time of release, the information presented here is the most up-to-date and supersedes information presented in the identified documents. Please contact Customer Support to determine whether any subsequent document updates have been made. Please refer to "Technical Support" or your License Agreement for details on contacting customer support.

GlobalFIX Installation and Configuration Guide

The GlobalFIX Installation and Configuration Guide requires the following changes:

Chapter 5: Configuring GlobalFIX Databases

- The introductory paragraph in the section Creating the FIX and Message Broker Databases for Oracle | Installing the databases | Post-installation (page 5-16) should also include:

  "Furthermore, if you have installed GlobalFIX and Oracle under separate users, set LD_LIBRARY_PATH=$ORACLE_HOME/lib for your GlobalFIX user and build your MBFFS database while logged in to your GlobalFIX user account."

- Step 3 of the section Creating the FIX and Message Broker Databases for Oracle | Installing the databases | Post-installation (page 5-17) should read:

  "3. Ensure the Oracle 8.1.7 JDBC driver (classes12.zip) resides in MB60ORACLEDIR\jdbc\lib."

Chapter 10: The GlobalFIX Reporting System Server

- The following note found on pages 10-4, 10-10, and 10-13 should read

  "For the GRS server to connect to the CF database, use the acronym form of the database name (for example, ASE, ORACLE:thin) as the dbType value."

  instead of

  "For the GRS server to connect to the CF database, use the acronym form of the database name (for example, ASE, ORA) as the dbType value."

- The following note should follow step 2b in the section Enabling the GlobalFIX Report Manager Web Application | Enabling the Web Application on EAServer (page 10-9):

  "If you are using an Oracle database, add %ORACLE_HOME%\jdbc\lib\classes12.zip and %ORACLE_HOME%\jdbc\lib\nls_charset12.zip to your %CLASSPATH% and %BOOTCLASSPATH% (Windows) or $ORACLE_HOME/jdbc/lib/classes12.zip and $ORACLE_HOME/jdbc/lib/nls_charset12.zip to your $CLASSPATH and $BOOTCLASSPATH (Unix)."

- The following note should follow step 2b in the section Enabling the GlobalFIX Report Manager Web Application | Enabling the Web Application on EAServer (page 10-9):

  "If you are using an Oracle database, add %ORACLE_HOME%\jdbc\lib\classes12.zip and %ORACLE_HOME%\jdbc\lib\nls_charset12.zip to your %CLASSPATH% and %BOOTCLASSPATH% (Windows) or $ORACLE_HOME/jdbc/lib/classes12.zip and $ORACLE_HOME/jdbc/lib/nls_charset12.zip to your $CLASSPATH and $BOOTCLASSPATH (Unix)."

- The following note should follow step 1a in the section Enabling the Web Application on WebLogic (page 10-11):

  "In order for the Web application to function properly, edit the config.xml file for the administration server and set the value for the property HostnameVerificationIgnored to *true*."

- Step 3e in the section Enabling the Web Application on WebLogic (page 10-12) should also say:

  "If you are using EAServer, copy the jconn2.jar file from the %FFSJCONNECTDIR%\classes directory to the GFIX6GRS\WEB-INF\lib directory. If you are using Oracle, copy classes12.zip and nls_charset12.zip from $ORACLE_HOME/jdbc/lib to GFIX6GRS/WEB-INF/lib rather than jconn2.jar."

- Step 3f in the section Enabling the Web Application on WebLogic (page 10-12) should read:

  "Move the reporting.xml file from the GFIX6GRS\WEB-INF\lib directory to the GFIX6GRS\WEB-INF\classes directory."

9. Technical support

Each Financial Fusion installation that has purchased a support contract has one or more designated people who are authorized to contact Financial Fusion Technical Support. If you have any questions about this installation or if you need assistance during the installation process, ask the designated person to contact Financial Fusion Technical Support or the Sybase subsidiary in your area.