

FIXEdge Release Notes

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FIXEdge 6.8.0 Release Notes

FIXEdge 6.8.0 released on July 4, 2019

New Features and improvements

SSL support changes:

- An initiator can now use a certificate signed by counterparty's CA certificate for authentication
- Added support for the following SSL certificates formats : pfx files, .pem encoded files, .der - binary encoded files in ASN1 standard.
- Added support of SSL certificates with and without passwords are supported. Settings [SSLCertificatePassword](#) and [SSLPrivateKeyPassword_were](#) introduced.
- SSLRequireClientCertificate property was replaced by [SSLValidatePeerCertificate](#).
- SSLCheckPrivateKey property was removed. Correspondence between the key and certificate will be checked automatically. FIX Edge does not establish session if the key doesn't correspond to the certificate.

For more information see: [Configuring FIX Sessions](#), [How to configure built-in SSL support for FIX session in FIXEdge](#)

Please note, that SSL-related properties:

- [SSLCertificatePassword](#)
- [SSLPrivateKeyPassword](#)
- [SSLValidatePeerCertificate](#).

can be set via editing engine.properties and FIXEdge.properties only.

FIXICC

- The latest version of [FIXICC 2.10.18](#) comes with the FIXEdge.

Changes in ICE Trade Capture Solution

- Performance optimization on duplicates filtering in stored procedures
- FIX dictionaries are updated according to [ICE FIX Trade Capture specification version 4.5](#)

Changes in ICE Private Order Feed Drop Copy Solution

- FIX dictionaries are updated according to [ICE POF specification version 3.5](#)

Logging improvements:

- Added logging of host:port for incoming connection event:

Host:port of incoming connection was added	
Previous message	[NOTE] 20190129-06:56:49.319 [13100] [Engine] - New incoming connection was detected (from 127.0.0.1:60779)
Current message	[NOTE] 20190129-06:56:49.319 [13100] [Engine] - New incoming connection was detected (from 127.0.0.1:60779 to 127.0.0.1:9011)

- VS 2010 C++ Redistributable Package (x64) required for installation added to FIXEdge's \Redist\VC10 directory. Also refer to [Installation](#).

Fixed critical bugs:

- Reconnect mechanism doesn't work in FIXEdge's JMS adapter
- FIXEdge failure if LDAP authentication has been used.
- FIXICC shows state of the session right after FIXEdge start incorrectly
- FIX Admin Session prevents graceful termination of FIXEdge
- [REST Admin API](#) has inconsistencies between parameters on POST session create request and GET session parameters.
- Calling Java Script function saveToHistory with incorrect arguments leads to FIXEdge malfunction

FIXEdge 6.7.1 Release Notes

FIXEdge 6.7.1 released on March 6, 2019

Changes in [ICE Trade Capture Solution](#)

- Support of [ICE FIX Trade Capture specification version 4.4](#) was added
- SQL Stored Procedures are used instead of JavaScripts for data processing and saving to DB
- Support for [Defined Strategy \(35=UDS\)](#) messages was added:
 - [Data Model](#) was adjusted to store all the data coming in Defined Strategy (35=UDS) messages
 - [Defined Strategies Subscriptions](#) are implemented for UDS
 - StrategyPreference(9006) and PublishMktCreationRealtime(9010) tag values are set to "1" in Logon(35=A) to receive new Defined Strategy (35=UDS) messages published over the session in real time. Receiving Defined Strategy (35=UDS) messages is possible when switching to New Security Definition interface (StrategyPreference(9006)=1) only.
- CurrentDate and SenderCompID columns are added to the Trade Capture Reports [database tables](#).
- Fields data types and indexes were changed in Trade Capture Reports and Security Definitions tables to increase the speed of message processing.
- The format of the additional dictionary was changed to resolve possible conflicts of the additional dictionaries in FIXEdge multiple connections configurations. See [How to use dictionary from ICE Trade Capture Solution package based on FIXEdge 6.7.1 in previous versions](#).
- Username and Password settings moved from custom Logon to the FIXEdge.properties configuration file.

See "How to upgrade" articles by the following links:

- [Upgrade of the existing ICE Trade Capture setup](#)
- [Upgrade of the existing configuration files to FIXEdge 6.7.1](#)

Changes in [ICE Private Order Feed Drop Copy Solution](#)

- Support of [ICE FIX Private Orders specification version 3.4](#) was added
- Support for Allocation (35=J) messages was added:
 - [Data Model](#) was adjusted to store all the data coming in Allocation (35=J) messages
 - Message processing by JavaScript is implemented
- [SessionQualifier](#) was added to configuration by default in ICE POF Solution in order to work along with ICE Trade Capture solution on the same FIXEdge instance.
- The format of the additional dictionary was changed to resolve possible conflicts of the additional dictionaries in FIXEdge multiple connections configurations. See [How to use dictionary from ICE Private Order Feed Solution package based on FIXEdge 6.7.1 in previous versions](#).
- Handling of duplicate Execution Report (35=8) messages is changed for correct processing of messages with the same ExecID(17) tag:
 - The uniqueness of messages is determined by the set of values of the following tags: ExecID(17), Symbol(55), Side(54), ExecType(150) (added), TransactTime(60) (used instead of SendingTime(52))
If TransactTime(60) tag isn't specified in the Execution Report, then the current time is inserted
If the TransactTime field value wasn't specified in the Execution Report (it has been generated by JS), then TransactTimeWasNULL is set to 'Y'
 - TimeStampPreference(9007) tag set to "1" in Logon(35=A) message for increase time precision in SendingTime(52), TransactTime (60), and RFQTransactTime(9213) tag values
 - [Table columns](#) for storage and post-processing PossDupFlag(43) and PossResend(97) tag values were added

- Configuration file FIXEdge.properties is extended with the following settings:
 - SSL settings were added
 - Username and Password setting are moved from custom Logon
 - Schedule for ICE Private Order Feed Drop Copy session was added

See "How to upgrade" articles by the following links:

- [Upgrade of the existing ICE Private Order Feed Drop Copy setup](#)
- [Upgrade of the existing configuration files to FIXEdge 6.7.1](#)

Extension Packs

- FIX 5.0 SP2 dictionary has been updated with [241-247 Extension Packs](#)

FIXEdge 6.7.0 Release Notes

FIXEdge 6.7.0 released on December 19, 2018

New Features and improvements

- Added option [to log important \(configurable\) lifecycle events](#) (i.e. application starting, application complete) to ArcSight
- Added [option for logging](#) to Splunk
- Added support for .pfx and .der certificates for acceptor sessions (See [How to configure built-in SSL support for FIX session in FIXEdge](#) for details)
- Property [SSLCiphersList](#) has been added to configure ciphers for SSL connections (See [How to use SSL with FIX Antenna C++ and FIX Antenna .NET](#) also)

Changes in ICE Trade Capture Solution

- SSL for ICE session has been enabled in default configuration
- Tables columns names are explicitly specified in stored procedure
- Added internal buffering for incoming messages from FIX session to mitigate of too high rate of Security Definition messages from ICE
- Added support [ICE FIX Trade Capture specification version 4.3](#)

Changes in REST Admin API

- The command to stop FIXEdge has been introduced in the [REST Admin API](#)

Logging improvements:

Typo has been fixed:	
Previous message	2018-05-18 07:12:16,521 UTC DEBUG [JMSAdaptorTransportLayer.JMSTA] 1095492 Sending onStateChanged() to CORRECLTY_ TERMINATED
Current message	2018-05-18 07:12:16,521 UTC DEBUG [JMSAdaptorTransportLayer.JMSTA] 1095492 Sending onStateChanged() to CORRECTLY_ TERMINATED
Logging category has been changed:	
Previous message	2018-05-18 07:12:16,521 UTC DEBUG [JNI_WRAPPER] 1095492 Session 'SocGenProducer' created. Sending onLogon to dispatcher.
Current message	2018-05-18 07:12:16,521 UTC INFO [JNI_WRAPPER] 1095492 Session 'SocGenProducer' created. Sending onLogon to dispatcher.
Logging category has been changed:	
Previous message	2018-05-18 07:12:16,521 UTC DEBUG [JNI_WRAPPER] 1095492 Session 'SocGenProducer' connected.
Current message	2018-05-18 07:12:16,521 UTC INFO [JNI_WRAPPER] 1095492 Session 'SocGenProducer' connected.
Logging category has been changed:	
Previous message	2018-05-18 07:12:16,521 UTC DEBUG [JNI_WRAPPER] 1095492 Session 'SocGenProducer' disconnected with reason [<reason>]. Sending onLogout to dispatcher.

Current message	2018-05-18 07:12:16,521 UTC INFO [JNI_WRAPPER] 1095492 Session 'SocGenProducer' disconnected with reason [<reason>]. Sending onLogout to dispatcher.
Logging category has been changed:	
Previous message	2018-05-18 07:12:16,521 UTC DEBUG [JNI_WRAPPER] 1095492 Session 'SocGenProducer' destroyed.
Current message	2018-05-18 07:12:16,521 UTC INFO [JNI_WRAPPER] 1095492 Session 'SocGenProducer' destroyed.
Logging category has been changed:	
Previous message	2018-05-18 07:12:16,521 UTC DEBUG [JNI_WRAPPER] 1095492 Session 'SocGenProducer' reconnect.
Current message	2018-05-18 07:12:16,521 UTC INFO [JNI_WRAPPER] 1095492 Session 'SocGenProducer' reconnect.
Logging category has been changed and reason has been added:	
Previous message	2018-05-18 07:12:16,521 UTC DEBUG [JNI_WRAPPER] 1095492 Session 'SocGenProducer' creation error.
Current messages	2018-05-18 07:12:16,521 UTC ERROR [JNI_WRAPPER] 1095492 Session 'SocGenProducer' creation error. 2018-05-18 07:12:16,521 UTC ERROR [JNI_WRAPPER] 1095492 <reason>
Reason has been added:	
Previous message	2018-05-18 07:12:16,521 UTC ERROR [JNI_WRAPPER] 1095492 Session 'SocGenProducer' send message error.
Current messages	2018-05-18 07:12:16,521 UTC ERROR [JNI_WRAPPER] 1095492 Session 'SocGenProducer' send message error. 2018-05-18 07:12:16,521 UTC ERROR [JNI_WRAPPER] 1095492 <reason>
Logging category has been changed and reason has been added:	
Previous message	2018-05-18 07:12:16,521 UTC DEBUG [JNI_WRAPPER] 1095492 Session 'SocGenProducer' general error.
Current messages	2018-05-18 07:12:16,521 UTC ERROR [JNI_WRAPPER] 1095492 Session 'SocGenProducer' general error. 2018-05-18 07:12:16,521 UTC ERROR [JNI_WRAPPER] 1095492 <reason>

Fixed critical bugs:

- Incorrect FIX Session state in FIXICC after restarting the session
- Missing timestamps in session logs are after corrupted storage recovery
- Sequence numbers are processed incorrectly in certain cases when DeliverAppMessagesOutOfOrder=true
- Java Script function "createDateStr(DATETIMENanoUtc)" works incorrectly with undefined value for seconds on CentOS6
- Incorrect decoding of Latin-1 in CME STP Transport Adapter
- A flag Q (for queued FIX messages) is not replicated in FIX logs replicator.

Documentation:

[FIXEdge configuration with the principle of least privilege](#) has been documented

FIXEdge 6.6.1 Release Notes

FIXEdge 6.6.1 released on August 3, 2018

Critical bugs and fixes

- Action 'SendToTier' generates incorrect reject in response to Execution Report message.

FIXEdge 6.6.0 Release Notes

FIXEdge 6.6.0 released on July 24, 2018


New Features and improvements

ICE Trade Capture


- New interface of Security Definition (35=d) messages has been fully supported and enabled by default. Partial backward compatibility is supported - old interface of security definitions can be safely processed and stored in the data model.
 - Data Model has been adjusted to support and store all the data coming in new interface of Security Definition (35=d) messages.
 - Changes in FIX interface introduced by the latest [ICE Trading Platform Release](#) (June 8, 2018) have been supported.
 - The solution performance has been improved:
 - Introduced consequence requests of security definitions which prevent TCP buffer overflow and possible connection break. See updated [ICE Trade Capture Overview](#) and workflow overview for details.
 - Changed implementation of data storage mechanism: replaced JavaScript with SQL stored procedures.
 - Optimized indexes structure and their datatypes in Security Definitions tables.
- See "How to upgrade" article by the following link: [Pure installation of the new version of ICE Trade Capture solution](#).

IBM MQ Transport Adaptor

- ErrorsQueue has become enabled for all IBM MQ TA modes.

 All unprocessed messages will be routed to ErrorsQueue. Setup and handling ErrorsQueue on IBM MQ Manager is a client responsibility.
See [IBM MQ Series Adaptor Configuration](#) for more information

- MQ TA dependency (IBM MQ client library) has been updated to version 8.0.0.6.

 It is recommended to use IBM MQ Client library version 8.0.0.6
IBM MQ manager and client versions compatibility is described here <http://www-01.ibm.com/support/docview.wss?uid=swg21312967>.
However, current release was tested against IBM MQ Queue Manager 8.0.0.6 version only.

Logging improvements

Logging for getaddrinfo failure has been changed:	
Previous message	... getaddrinfo(<hostName>) failed: <error code>
Current message	... Nodename-to-address translation in protocol-independent manner failed - getaddrinfo(<hostName>) failed: <error code>. Please check DNS configuration. Most likely this error means DNS configuration issue.
JMS TA logging for messages without timestamps has been improved:	
Previous message	2018-05-22 10:14:31,533 UTC INFO [JNI_WRAPPER] 11232 Timestamp not found in FIXML message.
Current message	2018-05-22 10:14:31,533 UTC WARN [JNI_WRAPPER] 11232 There is no Timestamp in the delivered message. The delivery notification has been skipped.

Critical bugs and fixes

- Accepting a session during FIXEdge initialization could lead the failure.
- Accepting a session during shutdown could interrupt the graceful stop.
- IBM MQ Transport Adapter's transaction cannot be rolled back in the case when FIXEdge failed to parse the first message of the batch.
- Memory leak appears in [RabbitMQ Transport Adapter](#).
- Error message about repeating group size has an incorrect description.
- Non-graceful termination leads to the loss of all messages in the persistentMM storage on Windows.
- FMXML handler doesn't produce valid XML in case XML-reserved symbols are used.
- Log Replicator doesn't work with growing log files.
- Service created via replication tool can't start correctly.

FIXEdge 6.5.0 Release Notes

FIXEdge 6.5.0 released on March 16, 2018

New Features and improvements

- [CME Secure Logon](#) support has been added. Refer to [How to connect to CME Globex using Secure Logon](#) for more information;
- A new threading mode has been added (SocketPriority = DIRECT_SEND). Refer to [How to use SocketPriority parameter](#) article for more information;
- Queuing strategy for handling gaps has been added. Refer to [How to set strategy for processing out-of-sequence messages](#);
- FIXEdge performance in FIX protocol scenario conversion has been improved up to 8% (response time);
- Session qualifier support has been added. Refer to [How to use SessionQualifier](#) for more information;
- [Limits notifications](#) for unregistered acceptors have been added;
- Support of debug-level logging for OpenLDAP library is available since FIXEdge 6.2. Refer to the [appropriate parameter](#).

ICE Trade Capture

- New interface of Security Definition (35=d) messages has been supported and enabled by default;
- Unique Option market IDs (OXXFXX) can be now requested via Security Definition Request (35=c) message;
- Configuration has been extended to store all the fields (including MiFID II fields) of Trade Capture Report (35=AE) and Security Definition (35=d) messages in the database.

Extension Packs

- [FIX 5.0 SP2](#) dictionary has been updated with [237-240 Extension Packs](#).

FIXICC

- The latest version of [FIXICC 2.10.11](#) comes with the FIXEdge.

Critical bugs and fixes

- `IntradayLogoutTolerance=false` is ignored when SocketOpPriority is AGGRESSIVE_SEND_AND_RECEIVE;
- MIC codes are outdated in FIX/FIXML dictionaries;
- SMTP adaptor doesn't work with TLS encryption;
- Incorrect conversion of UTCTimestamp in FIXML to FIX conversion.

Breaking changes

- Windows version of FIXEdge has been built using VS 2015. VS 2015 C++ Redistributable Package (x64) is required for installation (it can be found in FIXEdge's \Redist directory or downloaded from [Microsoft web-site](#)). Also refer to [Installation](#) or [Upgrade instruction](#);
- [Tibco TA](#) - linking mode has been changed for Tibco client libs on Windows (static to dynamic): tibrv.dll, tibrvcm.dll, tibrvft.dll are supposed to be in PATH (or in bin directory).

FIXEdge SDK updates

- Introduced ability to reject the connection with custom Logout in FE SDK;
- Introduced ability to modify confirming Logon in FE SDK;
- Introduced ability to send PreparedMessage messages from FE SDK Handlers/Adapters;
- Introduced the same password secure mechanism like Transport Adapters to FE SDK Handler.

FIXEdge 6.4.0 Release Notes

FIXEdge 6.4.0 released on December 08, 2017

New Features and Improvements

CME ClearPort

- CME ClearPort API handler has been improved to meet CME security requirements (see [here](#))

Logging improvements

	Old category	Old format	New Category	New format
Meaningless record has been removed	INFO	[STPAdaptor] <thread> Received FIX Email message contains unknown sender name 'CMESTPFIX3:IRATFIRM', message was skipped.		
Severity has been changed, text has been changed	ERROR	[STPAdaptor] <thread> Send message to user failed, reason: 'Observer->send returns false'	DEBUG	[STPAdaptor] <thread> No rule matching message from STP has been found. Message: <FIX message>
improvements of tiers and permissions logging	INFO	[BL_RoutingTable] <thread> Tiers cache contains 31 strings	INFO	[BL_RoutingTable] <thread> Tiers cache contains 4 permission(s), 1 tier(s), 10 tier member(s).

Grammar has been improved	ERROR	[EngineAdaptor] <thread> Session No. ACCEPTOR2 <FIXEDGE, FIXCLIENT2> cannot be created now. Reason: Schedule properties is empty	ERROR	[EngineAdaptor] <thread> Session No. ACCEPTOR2 <FIXEDGE, FIXCLIENT2> cannot be created now. Reason: Schedule properties are empty
extra symbol has been removed	WARN	[FL_FixEngine] <thread> Session limit 'IncomingThroughputLimit for the session FIXEDGEFIXCLIENT1 is reached. Current value: 1000, threshold value: 100	WARN	[FL_FixEngine] <thread> Session limit IncomingThroughputLimit for the session FIXEDGEFIXCLIENT1 is reached. Current value: 1000, threshold value: 100
extra symbol has been removed	INFO	[FL_FixEngine] <timestamp> INFO [FL_FixEngine] <thread> Session limit 'IncomingThroughputLimit for the session FIXEDGEFIXCLIENT1 is in range. Current value: 0, threshold value: 100	INFO	[FL_FixEngine] <thread> Session limit IncomingThroughputLimit for the session FIXEDGEFIXCLIENT1 is in range. Current value: 0, threshold value: 100
Grammar has been improved		Reconnection tryings is elapsed for the HTTPS client ... reconnect tries is elapsed		Reconnection tries are elapsed for the HTTPS client ... reconnect tries are elapsed
record has been removed	ERROR	[JNI_WRAPPER TransportLayer.RMQTA] <thread> Exception occured while executing TA getMonitoringParameters().		

Experimental features:

- Rest Admin API interface has been introduced (See [FIXEdge Admin REST API](#)).

Business Layer

- JavaScript function to check accessibility of FIX field has been added. See [Operations with message fields](#) for more info.

Extension Packs:

- [FIX 5.0 SP2](#) dictionary has been updated with [229-236 Extension Packs](#).

Critical bugs and fixes

- **! Breaking change:** Incoming session is accepted even if CreateSessionEvent finishes with errors - see [Element CreateSessionEvent](#) block.
- FIX to XML conversion using action <Convert> doesn't work with microsecond precision tags.
- XSLT transformation leads to a memory leak

FIXEdge 6.3.0 Release Notes

FIXEdge 6.3.0 released on September 20, 2017

New Features and Improvements

Session-level improvements

- A mechanism for skipping duplicated resend requests has been implemented
- An ability to limit the reply volume on resend request has been introduced
- The default value of [ResendMessagesBlockSize](#) has been changed to 1000 to improve reliability of FIX connectivity

To learn more about these improvements, please visit [How to handle Resend Requests](#) page.

Rest Acceptor Transport Adapter

- [Rest Acceptor Transport Adapter](#) has been added

Logging improvements

- Logging category has been changed for a number of cases:

Message	Old category	New category	Comment
Session <sender, target> : Error during processing Logon message from 127.0.0.1: 62358: Session is not waiting for connect: current state is <XXX>	ERROR	WARN	
transport is down - cancel requests, notify user	INFO	ERROR	CME STP Transport Adaptor specific change

[CME STP Trade Capture](#)

- Number of attempts of sending requests to CME STP in case of HTTPS transport error has been made configurable by means of SendingMaxAttempts property (equal to 2 by default).

Snippet from FIXEdge.properties

```
TransportLayer.CMESTP.SendingMaxAttempts = 2
```

- CME STP Transport Adapter has been improved to perform additional attempts to send HTTPS request in case of any CME STP transport error

[ICE Trade Capture](#)

- Schedules for ICE Test and Prod environments were introduced into the ICE Trade Capture configuration. Check [ICE Trade Capture FAQ](#) for details

Critical bugs and fixes

- Engine processes message after session is disconnected
- FIX sessions are blocked for heartbeat in case resend request processing
- JS function parseMessage doesn't use application version as hint for a parser
- FIXICC incorrectly handles FIX sessions with symbols < , > and & in either targetCompID or senderCompID.
- CME STP Transport Adapter sends wrong LastUpdateTm value
- Messages may be lost while resending from persistent in [RabbitMQ Transport Adapter](#)
- ICE Handler: FIXEdge requests the data from ICE that already has been received

Known Issues

JMS Transport Adapter and Rabbit MQ Transport Adapter may not start due to issue with CVE-2017-1000364 update of RHEL | CentOS 6.9 (kernel 2.6.32-696.3.2.el6.x86_64).

Temporary solution.

In order to fix it add "-Xss2m parameter into the Java Virtual Machine configuration file:

- conf\jms-ta-distribution\etc\JVM_Options.jvmopts - for the JMS Transport Adapter
- conf\amqp-ta-distribution\etc\JVM_Options.jvmopts - for the Rabbit MQ Transport Adapter

Documentation

- [ICE Trade Capture FAQ](#) page has been added to help with addressing most common questions related to [ICE Trade Capture Solution](#)
- FIXEdge readiness to the challenges on the front of the cybersecurity has been described in [FIXEdge Security Assurance](#) article

FIXEdge 6.2.0 Release Notes

FIXEdge 6.2.0 released on June 23, 2017

New Features and Improvements

Latest FIX Antenna C++ under the hood:

- FIXEdge has been built with [FIXAntenna 2.20.0](#) with changed logging format for a number of cases. See [FIX Antenna C++ Release Notes](#) for more details.

MIFID II support:

- Timestamps with increased precision can be validated in incoming messages (for UTCTimestamp, UTCTimeOnly, TZTimestamp, TZTimeOnly formats)
- Timestamps in SendingTime (52), OrigSendingTime (122) are filled with configurable precision (per-session [configurable property](#))
- BL [CopyField](#) action has been enriched with methods intended to receive messages from the session with one timestamp precision and send to the session with another timestamp precision
- JavaScript functionality has been extended with [getNSec](#), [setNSec](#), [changeNSec](#) to support high-precision timestamps

Please note that even though FIX Antenna C++ and FIXEdge support high precision timestamps the real accuracy of timestamps is limited by the operation system and hardware.

For more MIFID II compliance details see <https://www.b2bits.com/consulting/regulatory/mifid-ii.html>.

Extension Packs:

- [FIX 5.0 SP2](#) dictionary has been updated with [217-228 Extension Packs](#).

[RabbitMQ Transport Adapter](#)

- RabbitMQ Adaptor functionality has been extended with "ExchangeName" and "Addresses" configuration parameters. Check [RMQ Transport Adaptor Installation Guide](#) for details.

[FIXICC](#)

- The latest version of FIXICC 2.10.7 comes with the FIXEdge.

[Others:](#)

- Validation rules for time-related js-functions have been improved. See [BL Scripting with JavaScript#AdditionalDateoperations](#) for details.

Critical bugs and fixes

- FIXEdge cannot be started on Linux if directory name contains spaces
- FIXEdge cannot be started If two same sessions are listed in session list in config file
- CME STP Transport Adaptor: FIX session can't connect to FIXEdge after several FIX session's simultaneous logout
- FIXEdge crashes if JavaScript functions are used incorrectly .
- FIX dictionary for FIX 5.0, 5.0 SP1, 5.0 SP2: Tag CalculatedCcyLastQty (Tag = 1056) has incorrect requirement condition

Documentation

- [CME STP Trade Capture](#) documentation has been updated
- [ICE Trade Capture](#) documentation has been updated

Known issues

- Log Replicator incorrectly synchronizes logs if their timestamps precision is higher than a millisecond.
- CME STP Transport Adaptor sends wrong LastUpdateTm value

FIXEdge 6.1.0 Release Notes

FIXEdge 6.1.0 released on March 31, 2017

New Features and Improvements

- FIXEdge has been built with latest FIX Antenna C++ Release ([2.18.1](#))
- Environment variables can be used in FIXEdge.properties and engine.properties (not supported through FIXICC UI though)

Bugfixes

- RabbitMQ TA goes into infinite cycle
- RabbitMQ TA doesn't reconnect according to schedule
- RabbitMQ TA Consumer from group can't be created
- CME STP adaptor falls into deadlock, causing FixEdge to stop accepting connections.
- Logs are not deleted using FIXICC in Linux
- Memory leak in In-Memory History
- Memory corruption due to improper deinitialization of ODBC resources when working with ODBC History (postgres specific)

Known issues

Since version 6.1.0 the JavaScript function getAsNumber works in another way in case the value can't be converted to a number. If previously it returned 0 if the whole string cannot be converted to a number, now it takes the substring till the first non-digit character and converts this substring. E.g. "20170321-05:00:00" is returned as 20170321 but not as 0 as it was in previous releases.

FIXEdge 6.0.0 Release Notes

FIXEdge 6.0.0 released on February 28, 2017

New Features and Improvements

Scheduler:

The following features have been introduced in session scheduler:

1. ability to schedule the launch and termination of sessions at pre-defined times and dates;
2. use CRON expressions for sessions schedule accurate to the second;
3. ability to specify days off for sessions schedule;
4. ability to specify time zone for sessions schedule;
5. ability to assign one schedule to multiple sessions.

Guide for new functionality usage "[How to upgrade Session Schedule to new format](#)" and an article "[Session Schedule Settings](#)" with the description of all the new scheduler related properties are available in Products Knowledge Base.

Backward compatibility

FIXEdge 6.0 is backward compatible with the previous FIXEdge versions.

Critical bugs and fixes

The following bugs have been fixed:

- FE doesn't start if doesn't have permissions for logs folder.
- FE doesn't start when FIX50SP2EP is used as custom protocol.
- FE doesn't output an error message to Linux syslog if there is no space on the disk.
- Asynchronous connection for Initiator doesn't work in some cases.

FIXEdge 5.14.2 Release Notes

FIXEdge 5.14.2 released on December 29, 2016

Critical bugs and fixes

The following bugs have been fixed:

- Error on archiving logs (introduced in 5.13.0)
- Error on multiple open file descriptors (introduced in 5.13.0)

FIXEdge 5.14.1 Release Notes

FIXEdge 5.14.1 released on December 16, 2016

New Features and Improvements

Adapters:

- Path to TransportLayer.JMSTA.JVMOptionsFile has been unified for [RMQ Transport Adaptor](#) and [JMS Transport Adapter](#).

Protection:

- Compile- and run-time checks to detect buffer overflows (FORTIFY_SOURCE option of gcc compiler) had been enabled.

Critical bugs and fixes

The following bugs have been fixed:

- Adding of user with a subnet range of IP's within the "Source IP Address" field under the "Security" tab doesn't work in FIXICC.
- The second hidden tag is not masked in a logon message if the tags were divided by space.

FIXEdge 5.14.0 Release Notes

FIXEdge 5.14.0 released on November 23, 2016

New Features and Improvements

Adapters:

- New API to develop Transport Adaptors in Java has been added.
Refer to [Universal Transport Adaptor Configuration](#) for details.

Performance:

- JavaScript performance has been improved by introducing JIT in 1.8.5 version of SpiderMonkey library (both Linux and Windows versions).

Other features:

- CentOS 5/ RHEL 5 support has been discontinued.

Critical bugs and fixes

The following bugs have been fixed:

- FIXEdge application log rotation doesn't apply correctly in Windows system.
- Several milliseconds delay may occur during session destroying when terminated non-gracefully.

FIXEdge 5.13.0 Release Notes

FIXEdge 5.13.0 released on November 17, 2016

New Features and improvements

Protection mechanism

- FIXEdge detects and recovers broken storage on startup. Refer to [Recovery procedure for a session with corrupted storages](#).
- FIXEdge prevents corruption of history, configuration and properties files during a failure.

Other improvements:

- Ability to convert custom dictionaries has been improved: '[Convert](#)' action in BL rules supports custom dictionaries conversion.

Critical bugs and fixes

The following bugs have been fixed:

- Default value of HBI does not apply for Initiator.
- FIX connection reject reason does not log for Acceptor.
- JS function '[setNumField](#)' doesn't process negative argument.
- Incoming message considers as garbled in specific conditions.

FIXEdge 5.12.2 Release Notes

FIXEdge 5.12.2 released on October, 18, 2016

New Features and improvements

Extension Packs:

- [FIX 5.0 SP2](#) dictionary has been updated with [209-216 Extension Packs](#).

Other improvements:

- FIX session properties [HiddenLogonCredentials](#) and [MaskedTags](#) have been made configurable from FIXICC UI.
- CME STP polling interval has been fixed according to CME requirements.

Documentation

- "[How to save session state to History](#)" article has been published.

FIXEdge 5.12.1 Release Notes

FIXEdge 5.12.1 released on September, 16, 2016

New Features and Improvements

Adapters:

- [RabbitMQ Transport Adapter](#) has been added.

FIXEdge 5.12.0 Release Notes

FIXEdge 5.12.0 released on August, 16, 2016

New Features and Improvements

Protection from abnormal user behavior:

- The [property](#) for limitation of number of incoming simultaneous connections that haven't sent logon message yet from one host has been added (5 connections by default).
- The [property](#) for limitation of connection time for an incoming connection that hasn't sent logon message yet has been added (5 seconds by default).
- The [property](#) for limitation of the maximum size of the buffer of incoming messages has been added (no limitation by default).
- CPU usage on receiving large messages (for messages greater than 64 KB) has been reduced.

Please see [How to configure TCP protection in FIXEdge](#) article for details.

Throttling or Overload protection mechanism

- Added FIXEdge session property **OutgoingQueueSize** for monitoring of outgoing queue
- Added FIX Edge session property **IncomingThroughputLimit** for monitoring of incoming throughput
- Added FIXEdge session property **IncomingMessagesLimit** for monitoring of number of messages received during a session

Please see [Overload protection in FIXEdge](#) article for more details.

Extension Packs:

- [FIX 5.0 SP2](#) dictionary has been updated with [197-208 Extension Packs](#).

Performance:

- Performance of massive resend requests has been improved for the case when [persistent storage type](#) is used (1 million messages is resent up to 180 times faster).
- JavaScript performance has been improved by introducing JIT in 1.8.5 version of SpiderMonkey library (only windows version of FIXEdge).

Adapters:

- The ability to prevent message loss in MQ TA and reduce the number of messages in transaction to meet MaxUncommittedMsgs limit in MQ queue manager has been added.
- Filters that allows to make a decision how to handle incoming messages has been added to MQ TA.

Other improvements:

- Error description for fast mapping has been improved.
- DisableTCPBuffer has become the alias for TcpBufferDisabled property.

Critical bugs and fixes

The following bugs and vulnerabilities have been fixed:

- FIXEdge works wrong with absolute paths in FIXICC.PIDFile property.
- FIXEdge doesn't start if a session from Sessions list is not described.
- FIXEdge crashes when addressing to the non-existent tag in the repeating group.
- FIXEdge connects to primary connection even if ActiveConnection = backup.
- FIXEdge unable to recover availability after the limit of file descriptors was reached in Linux.
- Property Validation.ProhibitDuplicatedTags = true wasn't applied.
- FIXEdge hangs when the path in FixLayer.FixEngine.Sessions.ArchivePath is invalid.
- FIXEdge logs wrong boolean values in JavaScript.

FIXEdge 5.11.3 Release Notes

FIXEdge 5.11.3 released on June, 7, 2016

New Features and improvements

- Starting from FIXEdge 5.11.3 (with FIXICC 2.9.16) FIXICC and FIXICC Agent don't require the license file
- Defining the IP addresses range in the FIXEdge.properties file using CIDR

Critical bugs and fixes

The following bugs have been fixed:

- The comma separated IP addresses white list doesn't allow connecting to the session
- MQ Transport Adaptor routes incoming messages to error queue when FE is shutting down
- Tag 122 in Sequence Reset (4) message should be same as tag 52 (including milliseconds)
- MQ TA waits recv timeout before pass partial batch to BL

FIXEdge 5.11.2 Release Notes

FIXEdge 5.11.2 released on March, 16, 2016

New Features and improvements

- [FIXEdge SDK package](#) for creation custom Handlers and Transport Adaptors has been added
- The [Transform](#) attribute TargetProtocol supports the same format as [Session's Version property](#)

Critical bugs and fixes

The following bugs have been fixed:

- Wrong behavior of the session while reconnecting
- [FIXEdge](#) may delay processing messages with low number of workers under the high load
- [FIXEdge](#) doesn't start when using the absolute path in Log.FileName
- FIX 4.4 Session Level Reject messages are generated with trimmed fields
- Receiving a Logon message can lead to [FIXEdge](#) crash during Session termination
- [FIXEdge](#) session's property [TerminateTime](#) is interpreted as UTC time
- [FIXEdge](#) crashes on the JMS Transport Adaptor shutdown
- [JS element Transform](#) fails if the source message is Logon

FIXEdge 5.11.1 Release Notes

FIXEdge 5.11.1 released on February, 10, 2016

Critical bugs and fixes

The following bugs and vulnerabilities have been fixed:

- [FIXEdge](#) can't be re-started using FIXICC
- Denial of service in handling of invalid message types
- Exploit protections have been improved using advanced features provided by modern C++ compilers
- CreateReject RejectType="application" creates Execution Report with wrong values
- Impossible to read a group size field with getNumField method from JS script which is used in BL rules of FE

FIXEdge 5.11.0 Release Notes

FIXEdge 5.11.0 released on December 4, 2015.

New Features and improvements

- The ODBC history performance has been increased up to 4 times
- Processing of FIX versions in admin protocol has been added
- Reconnection of FIX Initiator session is allowed if SSL is used
- The record about using the SSL connection file has been added in the [FIXEdge.log](#)
- Support of SSL in FIX backup connections has been added
- JRE 1.8.0_65 has been added to the Linux package
- Cleaning script [FixEdge1.clean.sh](#) now removes `_fixedge.lock` file
- The latest version of FIXICC (2.9.4) has been added to the [FIXEdge](#) package
- JS to the ODBC history interface has been improved
- Thread affinity feature which allows setting CPU affinity for different threads has been added for performance tuning
- Paths to PID file (FIXICC.PIDFile in [FIXEdge.properties](#) and PidFile in [agent.properties](#)) were made optional to simplify configuration files
- The name of the directory with [FIXEdge](#) instance has been changed from *FixEdge1* to *FIXEdge1*

Documentation

- "[How to create FIXML message with repeating groups using XSLT](#)" article has been published

Critical bugs and fixes

The following bugs have been fixed:

- Working [FIXEdge](#) as NT service with absolute paths in [FIXEdge.properties](#)
- [FIXEdge](#) with CME STP adaptor crashes on shutdown
- Incorrect handling timezones in [JMS TA](#)
- Decoding boolean fields in incoming FAST messages in CQG MD Adaptor
- Processing <ActiveConnection> parameter
- Establishing the session with parameter "HandleSeqNumAtLogon=true"
- ICE Trade Capture Handler should allow establishing subscription with start date going up to 48 hours back in history
- First message wasn't sent to [IBM MQ TA](#) after [IBM MQ TA](#) restart
- Obsolete Currency tag(15) value for Turkish Lira in FIX dictionaries
- MQ Client recovery removes messages of other MQ clients until restart
- [IBM MQ TA](#) stops too long time
- [FIXEdge](#) crashes in case of a huge size value of some repeating group field

FIXEdge 5.10.1 Release Notes

FIXEdge 5.10.1 released on September 1, 2015.

New features and improvements

- Enhanced security due to [unconditionally encryption](#) of password data in Logon message
- Added [support of SSL](#) to IBM MQ Transport Adaptor

Business Layer

- New security functions for hashing password data by using [JS scripts](#) and [BL rules](#)

FIXEdge 5.10 Release Notes

FIXEdge 5.10 released on 22 June, 2015.

Tools

- [Log Replicator](#) tool has been added to address replication of storage in failover cluster

New Features and improvements

- [Separate port for admin session in FIXEdge](#)
- Logging of IP address of incoming connection has been added
- Customization of [interpretation Length fields for fields of type data](#) has been introduced

Documentation

- "[FIXEdge Failover Cluster installation](#)" guide has been added

Business Layer

- JS function [serializeMessage](#) has been added to get the string representation of a FIX message in JavaScript
- Authentication of FIX session through LDAP has been added: [LDAPAuthenticate](#) condition statement in BL

Critical bugs and fixes

- The following critical bugs have been fixed:
 - FIXEdge consumes a lot of memory
 - Memory leak during processing the [Business Layer Rules element "Action"](#)
 - FIXEdge crashes when receiving TradeCaptureReport from CME STP
 - Errors when FIXEdge and [FIXICC](#) are installed into a path which contains spaces

FIXEdge 5.9.1 Release Notes

Critical bugs and fixes

- The problem with establishing SSL connection from first attempt has been fixed
- The bug with long time FIXEdge starting in case there are large session logs has been fixed
- Memory leak in Business Layer has been fixed

FIXEdge 5.9.0 Release Notes

FIX Layer

- Based on new high performance version of FIX engine: FIX Antenna 2.13
- SSL support for FIX sessions has been implemented.
- Session properties 'ReconnectMaxTries', 'ReconnectInterval' have been added.
- Session properties 'Backup.ReconnectInterval', 'Backup.ReconnectMaxTries' have been added
- Ability to connect FIX Initiator sessions one by one with configured interval has been implemented.
- Different folders for backup sessions and FIX Edge backups has been configured. 'ArchivePath' property for FIX Edge backup folder has been added.

Business Layer

- New BL actions <StartSession> <DisconnectSession> <TerminateSession> and JS functions startSession disconnectSession terminateSession have been added.

Handler Layer

- ICE Handler
 - The configuration option allowing to request security definition once a day has been added

Transport Layer

- CME STP Transport Adaptor
 - Support of TLS 1.2 has been added
 - Support of snapshot request (SubReqTyp=0) has been implemented
 - Support of filters by Instrument, Date (trading or clearing), Input Source and Trade ID/Secondary Trade ID has been implemented.

Critical bugs and fixes

- Fatal error in CH Transport Adapter when disconnecting FIX session has been fixed.
- Fatal error in JMS Transport Adapter when stopping FIXEdge has been fixed.

- Fatal error in FIXAntenna when switching to backup connection at session start has been fixed.
- Fatal error in Transform Action execution has been fixed.
- Bug "FMXML handler doesn't work with FIX5x messages" has been fixed.
- Wrong interpretation of Linux freeTDS ODBC driver answer SQL_NO_DATA as error has been fixed.
- Bug "Logs of backup FIX session are not moved to archive" has been fixed.
- Bug "Fix session loads old logs at late start" has been fixed.

FIXEdge 5.8.2 Release Notes

Bugfix release.

Fixed bugs:

- [FAST Decoder] crash on FAST message decoding if the message does not match FAST template.

Changes:

- [FAST Decoder] FAST templates with ID but without tag 35 are ignored now
- [FAST Decoder] Check of length of string field in input stream that will be converted to char has been added
- [FAST Decoder] Check of length of integer field in input stream has been added
- [FAST Decoder] Mapping of FAST string to FIX LocalMktDate has been added
- [FIX Dictionary] Overriding of attribute 'name' in FIX message definition in additional FIX dictionary has been implemented
- [ICEHandler] An option to request security definitions only once a day regardless of FIXEdge restart has been added
- [ICEHandler] An option to reconnect all sessions to ICE in a defined interval between each other (as required by ICE) has been added

FIXEdge 5.8.1 Release Notes

Bugfix release.

Fixed bugs:

- [CME CT API] Bug fixes for new fields support. CME Handler is able to process the following new tags in Trade Capture Report message:
 - <TrdCaptRpt>: AvgPx, TradeType, TradeSubType, TotNumLegRpts
 - <RptSide>: AllocID, <RegTrdID> (including ID, Src, Evnt, Typ, LegRefID, Scope)
 - <Alloc> extended with allocation specific ID, Src, Evnt, Typ, LegRefID, Scope
- [CME CT API] Fixed storing to CME_SideRegIDs table
- [FAST Sessions] Checks for string length for mapping fast string->char has been added
- [FAST Sessions] Deadlock in onLogoutEvent of FAST session has been fixed
- [FAST Decoder] Access violation error has been fixed
- [JSDateEntity] additional validations for input parameters have been added
- [JSDateEntity] The issue with incorrect time handling in case of Daylight Saving Time is present in local time zone has been fixed

FIXEdge 5.8.0 Release Notes

New Interfaces to Chicago Mercantile Exchange (CME) APIs

- CME STP API
- CME Confirm Hub API

These APIs are in addition to the existing interface to CME Cleared Trades API, which has been also renovated to provide extended flexibility.

Trades from these API can be either routed to a FIX session or saved to a Database. Routing to all available middlewares (IBM MQ, TIBCO, JMS) is also supported both in FIX and FIXML (or other XML) format

FIX Layer

- Certification with London Metal Exchange (LME) has been passed.
- Use of custom FIX protocols and dialects in FIX sessions has been reworked to provide easy and flexible configuration
- Sending Username and Password in Logon message when BackupConnection is used has been implemented.
- Support of UsernameTag and PasswordTag has been implemented (for Active and Backup connections).

Business Layer

- Embedded JavaScript: getSourceSessionId() function has been added.

Package, documentation and logging

- Linux installation guide has been updated
- JMS Transport Adapter installation guide has been updated.
- Deployment on CentOS / RedHat Linux has been simplified by removing several steps
- FIXICC Agent has been embedded into Linux package

- FIXEdge logs have been made configurable to address the demand of integration with logs parsing and monitoring systems. Logs format is now can be configured similar to Log4j/Log4net logging.
- FIXEdge SDK for Transport Adaptors development has been released

Critical bugs and fixes

- Memory leak in Bridge Transport Adaptor has been fixed.
- Fatal error when stopping FIXEdge with JMS has been fixed.

FIXEdge 5.7.0 Release Notes

Package and documentation

- Improved Windows installer interface
- FIX Integrated Control Center was equipped with own local instance of Java
- Improved documentation

Transport Adaptors, Handlers and FIX routing

- Added FMXML handler and Splitter Transport Adapter for fast XML<->FIX transformations
- Introduced Tibco RV Transport Adapter for Linux
- Improved performance on XSL transformation (up to 40%)
- Introduced CME MS Handler for polling CME ClearedTrades
- Improved IBM MQ Transport Adapter: stability, using MQ transactions to improve performance
- Actualized samples for Simple Sockets Transport Adapter

Monitoring parameters in FIXICC for handlers / transport adaptors

Introduced ability to monitor and configure parameters of the following Handlers and Transport Adaptors

- FMXML handler
- HTTPS Transport Adapter
- CME MS handler
- Splitter Transport Adapter
- IBM MQ Transport Adapter

Critical bugs and fixes

- [BBP-2063] FIX field's length in ODBC history
- [BBP-1691] Error while parsing FIXML message from CME (CME Handler)
- [BBP-1844] Session does not start at configured StartTime
- [BBP-1639] - Due incorrect link to pid file FixEdge1.stop.sh script can't stop FE.
- Fixed many issues with date / time conversions
- Fixed memory leaks in InMemory History
- Added flag /GS to compiler on Windows: Stack buffer overrun detection

FIXEdge 5.6.2 Release Notes

Bugfix release.

Fixed bugs:

- [BBP-1844] Session does not start at configured StartTime

FIXEdge 5.6.1 Release Notes

2013-10-29

Bugfix release.

Fixed bugs:

- BBP-1639 Due incorrect link to pid file FixEdge1.stop.sh script can't stop FE