Strategy Studio: CMEiLinkExecutionHandler (Execution Handler)

CMEiLinkExecutionHandler is Strategy Studio's FIX interface to CME's iLink FIX 4.2-based order entry gateway. It is certified against both the Convenience Gateway (CGW) and Market Segment Gateway (MSGW).

This execution handler is enabled by adding the following setting to the server's main configuration file:

> **EXECUTION_HANDLER_MODE=CMEiLinkExecutionHandler**

Session Level Settings

Session-level settings are specified in the file execution_handler-conf/cme_ilink_fix.config. Notable settings include:

> **StartDay=*Sunday***
> **StartTime=*16:00:00***
> **EndDay=*Sunday***
> **EndTime=*05:59:59***
> * Required. Sets the session period defining sequence number reset. The above settings are recommended.
> **SocketConnectHost=*host***
> * Required. Target host IP.
> **SocketConnectPort=*port***
> * Required. Target host port.
> **ReconnectInterval=*seconds***
> * Reconnect wait period for a disconnected session. This should not be set lower than 60 seconds.
> **SenderCompID=*session,firm,fault tolerance***
> * Required. Combination of 3 character session id provided by CME, 3 character firm ID registering the session, and one character fault tolerance indicator. This latter component should be set to 'N'.
> **SenderSubID=<*OperatorID*>**
> * Required. Operator ID identifier. An arbitrary string up to 18 characters in length.
> **TargetCompID=CME**
> * Required. Must be "CME".
> **TargetSubID=<*SubID*>**
> * Required. Must be 'G' for CGW sessions or the MarketSegment ID for MSGW sessions.
> **SessionQualifier=<*MSID*>**
> * Conditional. Required for MSGW sessions. Should be set to the same value as the TargetSubID.
> **SenderLocationID=*country,state***
> * Required. User's geographic location. The first two characters specify the ISO country code. Additionally for US and Canada locations, a two-character state or province code is required separated by a comma (e.g., "US,IL"). Refer to CME's iLink Specification for valid values.
> **Password=*password***
> * Required. Session password provided by CME.
> **StrategyStudioAccount=*accountName[,accountName2,…]***
> * Required. Comma separated list of Strategy Studio accounts associated with this session. For MSGW sessions, the same <*accountName*> may be used for each Market Segment connection associated with the session. The correct connection will be chosen based on instrument properties obtained using the CMEReferenceDBPopulator.
> **CMEResendRequestMode=Y/N (default N)**
> * Conditional. Required for MSGW sessions. Enables non-standard ResendRequest behavior that is required by MSGW.

Message validation should be disabled by setting ***ValidateUserDefinedFields=N*** and ***ValidateFieldsOutOfOrder=N***.

Custom Order Parameters

Most order properties are set using OrderParams's fields. Order properties that are not included in OrderParams can be set via OrderParams's custom_params member, which is a std::vector<boost::any>. The values are expected to be of type std::pair<int, std::string>, with the first specifying the FIX tag number and the second specifying the string value for the FIX field. A full description of supported FIX tags is available in CME's *iLink Specification*.

OrderParams's custom_params may be used on both new orders and cancel replaces. Note that custom_params are not automatically cleared after submission of a new order; therefore, if the existing Order's OrderParams is used when sending a cancel replace, custom_params may need to be cleared before submission, preserving any expected tags for the replace.