

CME Globex[®] Platform

iLink 2.X Overview and SDK Navigation

Version: 1.3

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1. iLink 2.X Overview and SDK Navigation

Welcome to the iLink 2.X overview and SDK Navigation module. This module contains an overview of iLink 2.X and information on how to navigate the iLink 2.X SDK.

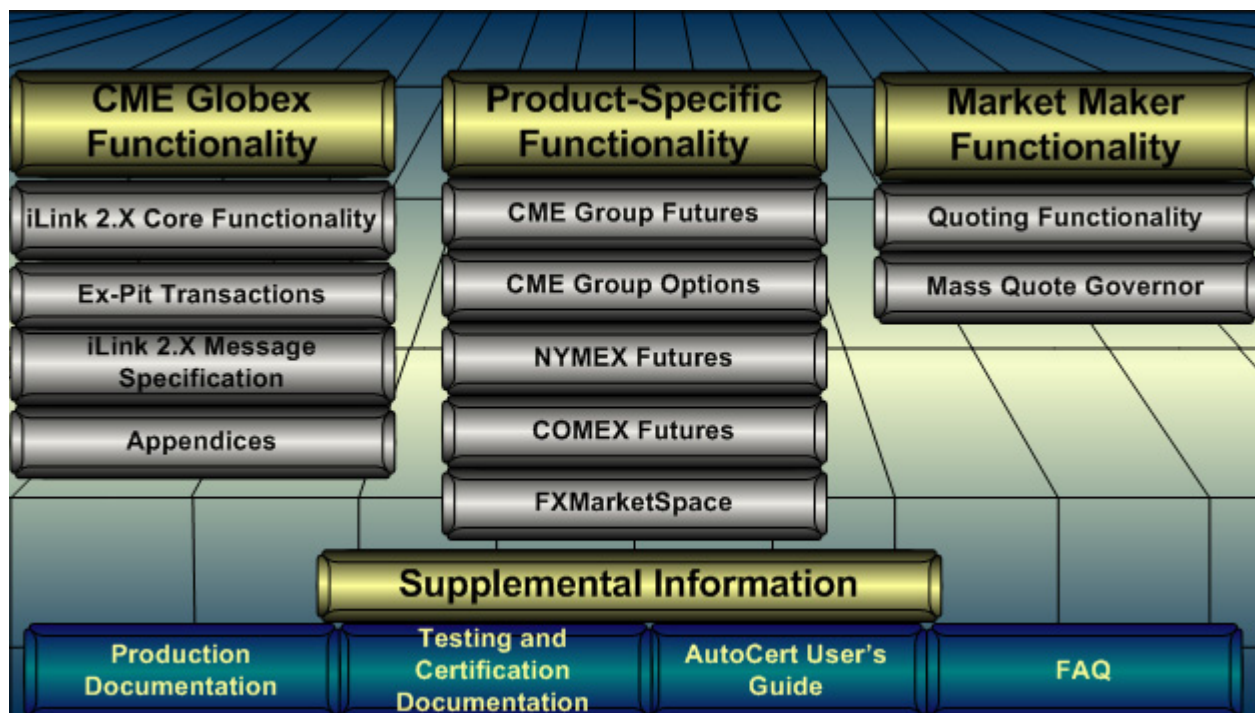
1.1 iLink 2.X Overview

The iLink 2.X order routing interface allows client systems access to the CME Globex platform virtually twenty-four hours a day. Utilizing FIX protocol, iLink 2.X facilitates order and quote entry, modification, cancellation, confirmation, and fill notification. Following the guidelines provided in this SDK, CME Group customers can build trading interfaces to all CME Globex markets, accessed via socket connection to establish a *session* between CME Globex and the client front-end system.

Note: iLink 2.X does not provide an API for order entry. iLink 2.X requires implementation of FIX protocol <http://www.fixprotocol.org>, an industry standard platform-independent interface, for order entry.

1.2 iLink 2.X SDK Navigation

The iLink 2.X SDK is organized by modules according to CME Globex Functionality, CME Group Product-Specific Functionality, Market-Maker-specific information, and supplemental information. This page is the navigation point for the SDK; click on any module to access the documentation. Once you are in a module, you can return to this navigation point by clicking on SDK Home, located on the cover page of each module.



1.3 Module Overview

CME Globex Functionality

- iLink 2.X Core Functionality
 - Session Management - procedure to establish and manage a bi-directional iLink 2.X session.
 - Beginning of Week Logon - procedure for beginning-of-week Logon.
 - Mid-Week Logon - procedure for mid-week Logon.
 - In-Session Logon - procedure for in-session Logon.
 - Heartbeat Message - how to ensure the connection between the client and CME Globex is in a normal state.
 - Test Request Message - procedure for using this message to ensure connection integrity.
 - Reject - Session Level - describes message reject secessions due to session-level rule violation.
 - Logout - procedure to terminate FIX session.
 - Sequencing - ensures that all messages to and from the CME Globex are in the correct order and can be recovered in the event of an error.
 - Fault Tolerance - describes dynamic fault tolerance for abnormal failure in the order execution path.
 - Supported Order Types and Qualifiers - supported order types and corresponding qualifiers for CME Group futures products.
 - Supported Contracts - link to all electronically traded CME Group contracts.
 - Trading on Behalf of a Client - procedure for authorized firms and clearing members to submit orders for clients.
 - Average Pricing System (APS) - procedure for grouping multiple orders together and assign them a single average price across the group
 - Client Order IDs - details specific to CME Globex processing for FIX tag 11-ClOrdID.
 - Quote Request (RFQ) Processing - Quote Request functionality enables CME Group customers to request a quote (submit an RFQ) with one or both sides.
- Message Specification - complete iLink 2.X message specification.
- Ex-Pit Transactions - Ex-Pit transactions are pre-arranged transactions occurring outside of the regular marketplace, including block, EFP and OTC trades. Ex-Pit transaction functionality facilitates market transparency by automating booking, and eliminating risk due to untimely transaction reporting.
- Appendices
 - Session Level Error Messages
 - Application Level Error Messages
 - Supported Order Entry Messages
 - Additional Clearing Information
 - Futures vs Options Processing
 - Strategy Types for all CME Group Products
 - Application Messages

Product Specific Functionality

These modules contain information for clients with iLink 2.X Core functionality in place who are developing applications to trade CME Group Futures or Options, and NYMEX futures. Topics include:

- CME Group Futures
 - CME Group Futures Spread Functionality
- CME Group Options
 - Basic CME Group Options Functionality - describes Core functionality specific to CME Group options such as supported order types and qualifiers, Cancel/Replace, etc.
 - Cabinet Pricing - rules specific to liquidating deep-out-of-the-money options instruments at lowest tradable price.
 - Options Naming - provides the naming conventions for CME Group options instruments constructed using the CME Group RLC Instrument Creation (MO) message.
 - Request for Cross (RFC) Order - RFC order functionality provides CME Group customers submitting RFC orders the best available price with optimal market transparency by allowing market participants to match orders against the RFC order.
 - User Defined Spreads (UDS) - Covered option instruments are the initial deployment of the UDS model on CME Globex. The term 'Covered' denotes a unique option instrument created by combining an exchange-defined outright option or option spread with one or two underlying outright future instruments.
- NYMEX Futures on CME Globex - This module contains information on NYMEX futures functionality available on CME Globex. For information on available products see: <http://www.nymexoncmeglobex.com/>
- COMEX Futures on CME Globex - This module contains information on COMEX futures functionality available on CME Globex.
- FXMarketSpace - This module contains information on FXMarketSpace. For information on available products see: <http://www.fxmarketspace.com/>

Market Maker Functionality

- Quoting Functionality
 - Mass Quotes for Market Makers - Authorized CME Globex platform Market Makers use Mass Quoting to submit bid/ask pairs and generate two-sided markets for multiple instruments for CME options.
 - Market Maker Protections - Market Maker Protections provide additional risk protection based on transaction events for Market Makers using Mass Quote functionality for CME Group options.
 - Quote Request - CME Group-approved Market Makers are authorized to submit indicative quotes via the Publishing Market Maker API.
- Mass Quote Governor
 - Mass Quote Governor limits the rate at which firms can submit mass quotes.

Supplemental Information

- Production Documentation - this link directs you to documentation designed to facilitate connecting to the CME Globex® production environment for iLink® and Market Data Platform.
- Testing and Certification Documentation - this link directs you to documentation designed to facilitate development and certification to CME Globex, iLink® and Market Data Platform via the certification environments and AutoCert+.
- AutoCert User's Guide - this module contains information on how customers can certify applications on AutoCert.
- FAQ - this module contains CME iLink 2.X frequently asked questions.

1.4 Getting Started

Before using the various modules in the iLink 2.X SDK, please note the following “typical” paths.

- If you are developing a client system for the first time, See “New Client System Development” on Page 4.
- If you are adding enhancements to an existing client system that is already using iLink 2.X, See “Existing Client System Development” on Page 5.

1.4.1 New Client System Development

New clients should refer to the modules in the following order:

- iLink 2.X Core Functionality
- Message Specification
- Ex-Pit Transactions (as applicable)
- Appendices
- Connectivity
- Testing and Certification
- FAQ
- CME Group Futures (as applicable)
- CME Group Options (as applicable)
- NYMEX Futures (as applicable)
- COMEX Futures (as applicable)
- FXMarketSpace (as applicable)
- Quoting Functionality (as applicable)
- Mass Quote Governor (as applicable)

1.4.2 Existing Client System Development

Existing clients who have already developed client systems with core functionality should refer to the modules in the following order:

- Message Specification
- Ex-Pit Transactions (as applicable)
- Appendices
- Connectivity
- Testing and Certification
- FAQ
- CME Group Futures (as applicable)
- CME Group Options (as applicable)
- NYMEX Futures (as applicable)
- COMEX Futures (as applicable)
- FXMarketSpace (as applicable)
- Quoting Functionality (as applicable)
- iLink 2.X Core Functionality (as applicable)

1.5 Document Dates

A revision history table is located at the end of each module. The initial release of the module is the date that the module was initially created. If a module is updated, that date is noted on the cover page as the Last Update on the cover page and in the revision history table.

Table1. 1. Revision History

Initial Release	Version	Last Update	Author	Description
1/19/07	1.0	N/A	LM	Initial Release
1/19/07	1.1	2/28/07	BLF	Added link to Connectivity Guide
1/19/07	1.2	8/6/07	NU	Updated Navigation diagram and updated Supplemental Information section to reflect the diagram.
1/19/07	1.3	4/30/08	CR	Rebrand for CME Group. Add Mass Quote Governor.