



Certification Environments Overview

Certification Environment
New Release Environment
Autocert+

Version 1.13
9/23/11

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Contents

Testing Environments Overview	4
Reference Documentation	4
Customer Testing Environments.....	4
Environments Schedules	6
BM&F BOVESPA.....	6
MexDer	6
Network Options	7
AutoCert+.....	7
Getting Started in the Testing Environments	7
Additional Information	8
Contact Information	8

1. Testing Environments Overview

CME Group offers two testing environments, Certification and New Release. These testing environments are designed to improve the customer development and testing experience.

All systems must certify for iLink order routing and/or FIX/FAST market data via the automated AutoCert+ tool. More information is available in the [AutoCert+ User Guide](#).

1.1 Reference Documentation

Refer to the following web page for information pertaining to the Certification and New Release environments: www.cmegroup.com/certsdk

1.2 Customer Testing Environments

Certification Environment

The Certification environment mirrors production functionality at all times. Customers can use the Certification environment to perform:

- Certification testing for CME Globex core functionality
- Maintenance testing
- Development testing for new customer system features (e.g. GUI) or functionality in production-like conditions

New Release Environment

The New Release environment is where new CME Globex products and releases are available for the customer to test prior to release in production. New functionalities will normally be released in the New Release environment 6 to 8 weeks prior to their release in production. New products will generally be available in New Release two weeks before production launch. Customers can use the New Release environment to perform:

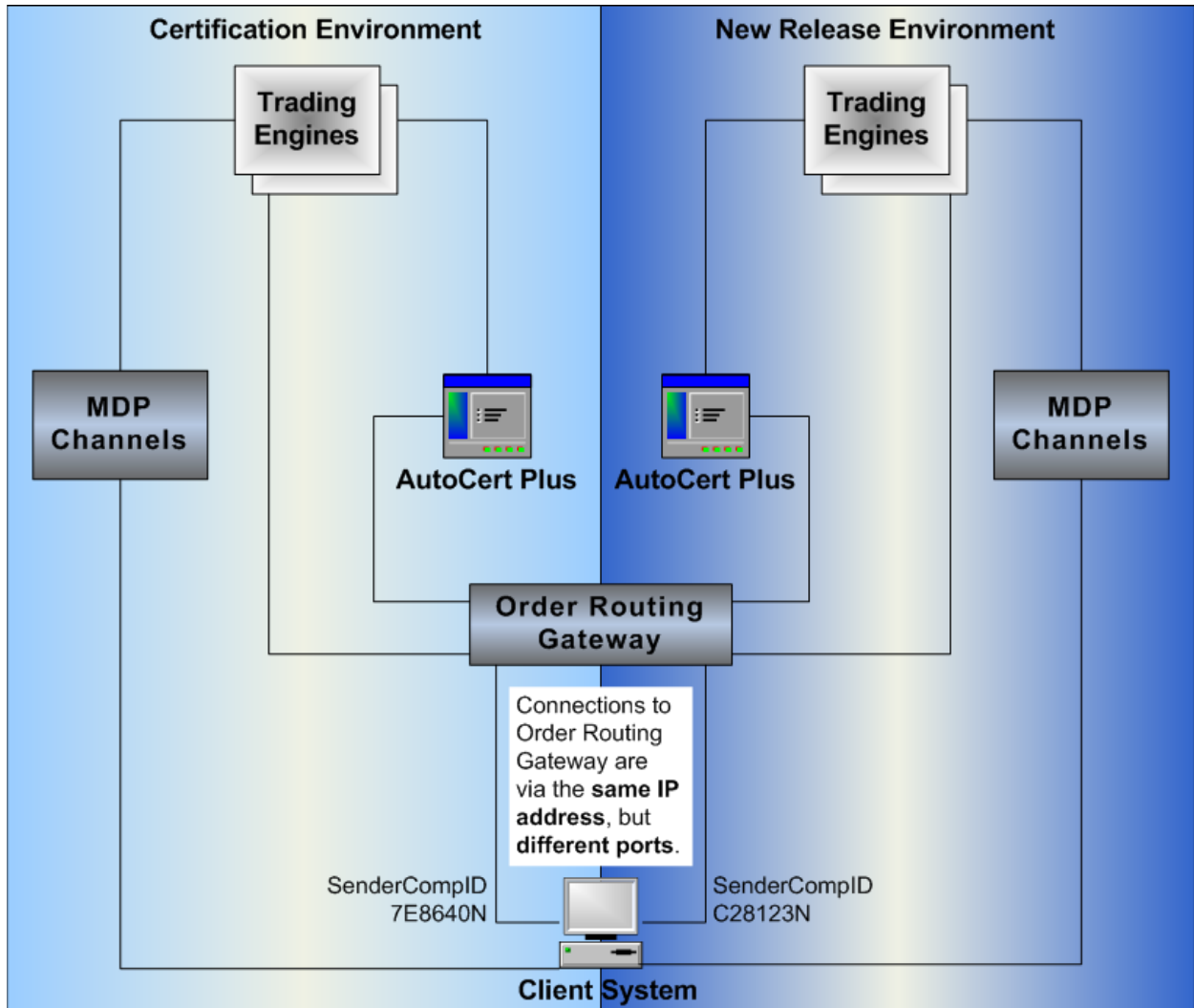
- New product testing
- Development testing on new CME Globex functionalities
- Certification testing on new CME Globex functionalities
- Performance testing with production-level data feeds

Testing Environments

In addition, both environments support **straight-through processing (STP) from CME Globex through CME Clearing testing environments**. In fact, both environments are connected to their own clearing testing environments. This allows customers, who have clearing setup in the production environment, to perform end-to-end testing by submitting and executing orders from their front-end systems and receiving the corresponding clearing trade reports on their back-end systems in conditions similar to production.

Features of the testing environments are explained and shown in the diagram below:

- Connection to both environments is through the Order Routing Gateway using the same IP address via different ports.
- Distinguishing which environment you are connected to is simplified by the ID format structure.



Market Data

Each environment has its own set of Market Data Platform multicast channels. Channel information for both environments is available on the CME Group FTP site as described in the FIX/FAST Core Functionality volume at www.cmegroup.com/globexsdk.

1.3 Environments Schedules

Both Certification and New Release are available 12:00 pm CT Monday - 4:00 pm CT Friday, except for the daily maintenance window 4:30 pm - 5:30 pm CT Monday - Thursday. Maintenance windows are a specified period of time during which an environment is unavailable in order to allow CME Group staff to launch and test new releases, and perform maintenance operations.

Performance Testing Sessions

Performance testing sessions are offered in New Release environment to allow customers to test their applications in conditions as close as possible to production. These performance testing sessions consist of replaying a 2-hour window of peak volume, real-time production level trading data across most products supported on CME Globex.

Note: Only market data performance testing is available during the session. Order entry performance testing is not available.

Note: Due to bandwidth limitations, VPN (Virtual Private Network) connections should not connect during performance testing because of the risk of interruptions. Customers are strongly advised to use higher bandwidth network connectivity options, as detailed in Network Connection Guide, <http://www.cmegroup.com/globex/files/CertConnectivity.pdf>.

Weekly Performance Testing Windows

- New Release environment - 7:00am to 9:00am CT on Friday.

1.3.1 BM&F BOVESPA

The BM&F BOVESPA testing environment and AutoCert+ for cross-exchange order routing and market data is available 8:00 a.m. - 4:00 p.m. CT Monday - Friday, except for the weekly maintenance windows on Tuesdays and Fridays:

- 12:00 - 3:00 p.m. CT, February 20 through March 12 and October 16 through November 6
- 11:00 a.m. - 2:00 p.m. CT, November 6 through February 20
- 1:00 - 4:00 p.m. CT, March 12 through October 16

Product trading schedules do not correspond to the production schedules. Contact BM&F BOVESPA directly for more information.

1.3.2 MexDer

The MexDer testing environment and AutoCert+ for cross-exchange order routing and market data is available 10:00 a.m. - 1:00 p.m. CT Monday - Friday.

Product trading schedules correspond to the production schedules. Contact MexDer directly for more information.

1.4 Network Options

The increased rate and bandwidth usage of market data makes VPN connections a less effective network connectivity solution for testing in production-like conditions.

CME Group is working on providing customers with connectivity solutions in addition to VPN to connect to the certification environments. Pricing is generally the same as in production for all network solutions. Clients will be notified as more network options become available. Some of these solutions include:

- VPN
- BT Radianz
- Ethernet MAN.

Please refer to the [Network Connection Guide](#) for all information related to network connectivity solutions.

1.5 AutoCert+

AutoCert+ is the automated certification tool for customer system certification for iLink order routing and FIX/FAST market data. The AutoCert+ tool requires a VPN to connect to a user-friendly web interface and guides customers through the entire certification process. AutoCert+ is flexible and scalable, allowing customers to simultaneously test order entry and market data messages, and to receive instantaneous test results with an explanation for failed tests. Finally, AutoCert+ has extensive online documentation, including an access guide, detailed test script descriptions and online help.

Functional/Certification Testing in AutoCert+ has a limit of 10 MPS (messages per second); Performance Testing is also available through AutoCert+ with support for up to 70 MPS. Weekly Performance Testing is available in the New Release Environment from 7:00 a.m. to 9:00 a.m. CT on Fridays.

Additional AutoCert+ access and online help information is available in the [AutoCert+ Access Guide](#).

1.6 Getting Started in the Testing Environments

In order to connect and test in the testing environments complete the following tasks:

1. Request and configure your new network connection by contacting your Global Account Manager.
 - a. You are invited to discuss other network options with your Global Account Manager.
 - b. This network connection allows you to perform functional testing on both environments and also to access AutoCert+.

Note: The AutoCert+ tool requires a VPN connection for certification testing.

2. Request new iLink IDs for each environment.
 - a. You can choose the firm IDs that you are using in production to perform front-end to back-end system testing.
 - Third-party system providers can provide and set up temporary IDs to perform functional testing.

- b. The iLink IDs used for connecting to the testing environments are the same as those used for certifying on AutoCert+.
 - c. The Session IDs indicate which environment you are connected to. If the ID is alpha-numeric-numeric (i.e. C28), you are connected to New Release environment. If the ID is numeric-alpha-numeric (i.e. 7E8), you are connected to Certification environment.
3. Download the config.xml file from the CME Group FTP site for configuration information for the applicable environment.

1.7 Additional Information

Details on the CME Globex testing environments is available at www.cmegroup.com/certsdk with information, forms and supporting documentation regarding testing and certification.

1.7.1 Contact Information

For technical development questions, please contact CSET Development support group at 312-930-2322 or csetgroup@cmegroup.com.

For all other inquiries, please contact your Global Account Manager at 312-634-8700 in the United States; +44.20.7796.7100 in Europe; or +65.6593.5574 in Asia

Revision History

Initial Release	Version	Last Update	Author	Description
2/16/07	1.0	N/A	LM	Initial Release
2/16/07	1.1	5/9//07	LM	Added note to section 1.1. Updated network option availability dates. Added links to CME Globex Market Data Platform New Release Certification Channel Definitions.
2/16/07	1.2	6/04/07	PM	Updated with minor editorial changes.
2/16/07	1.3	6/22/07	LM	Renamed Client DIRECTLink to Client CERTLink.
2/16/07	1.4	10/4/07	LM	Updated the following sections: Network Options on page 7, New Certification Environments Overview, Network Options on page 7, Network Options on page 7, and Project Timelines. Updated CME Group branding.
2/16/07	1.5	8/21/08	JG	Updated links and CME Group branding
2/16/07	1.6	2/28/09	CR	Updated Weekly Maintenance Window
2/16/07	1.7	4/15/09	ZC	Made revisions to bring content up to date.
2/16/07	1.8	5/26/09	ZC	Removed Client CERTLink references.
2/16/07	1.9	10/14/10	DT	Updated Network Options on page 7 for market data only.
2/16/07	1.10	12/20/10	DT	<ul style="list-style-type: none"> • Testing Environments Overview on page 4 Rewrote second paragraph • Certification Environment on page 4 Removed last bullet point • New Release Environment on page 4 Removed last bullet • Testing Environments on page 4 Removed 1st paragraph • Market Data on page 6 Edited 2nd sentence • Environments Schedules on page 6 Removed “Performance Testing Sessions” and “Weekly Performance Testing Windows.” • AutoCert+ on page 7 Rewrote section. • Rewrote Additional Information on page 8 • Updated Contact Information on page 8

Initial Release	Version	Last Update	Author	Description
2/16/07	1.11	6/17/11	DT	<ul style="list-style-type: none">• Removed second paragraph from Environments Schedules on page 6.• Added BM&F BOVESPA on page 6.• Added MexDer on page 6.
2/16/07	1.12	8/18/11	DT	<ul style="list-style-type: none">• Added bullet for performance testing to New Release Environment on page 4.• Added Performance Testing Sessions and Weekly Performance Testing Windows to Environments Schedules on page 6.
2/16/07	1.13	9/22/11	DT	AutoCert+ 4.0 release updates <ul style="list-style-type: none">• Removed paragraph about enabling Performance Testing from Environments Schedules on page 6• Removed sentences about enabling Performance Testing from AutoCert+ on page 7