

Document title

**EURONEXT OPTIQ PHASE 2: ORDER ENTRY
GATEWAY (OEG) AND MATCHING ENGINE (ME)
CONFORMANCE TEST GUIDELINES**

Document type or subject

Conformance test guidelines

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PURPOSE

This document provides guidelines on how to test customers' applications against Euronext's Optiq® Order Entry Gateway (OEG) and Matching Engine (ME) on Cash markets.

This document outlines all conformance steps required, how tests are organised and testing timelines.

TARGET AUDIENCE

The intended audience of this document is any client connecting to and trading on the Euronext Cash markets.

WHAT'S NEW?

The following lists only the most recent modification made to this revision/version.

REVISION NO./ VERSION NO.	DATE	AUTHOR	CHANGE DESCRIPTION
1.0	19 Jan 2018	Euronext	Publication of the conformance test guidelines
1.1	29 Jan 2018	Euronext	Updated version of conformance test guidelines

ASSOCIATED DOCUMENTS

All the IT documentation of Euronext can be found on a dedicated page of the Euronext website: <https://www.euronext.com/optiq/documentation>

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1. CONFORMANCE TEST GUIDELINES

Customers are required to validate the conformance of their software solutions for all applications that use the Optiq® Order Entry and Matching Engine for Cash markets in Production.

As communicated in the Info-Flash of [12 December 2017](#), Euronext is considering a migration phased by segment. More details on the final approach will be provided in an updated version of the Migration Guidelines document in January 2018.

Conformance testing starts 29 January 2018 for Cash Regulated Markets (Bonds, Equities, ETFs) and the Warrants market shortly followed by Trade Confirmation System (TCS) conformance. The period for conformance testing ends one week before the external dress rehearsal for the segment that will migrate to Optiq.

Please note that customers will not be able to access the Production environment for either Dress Rehearsal or Go-live if they have not completed their functional conformance tests on the relevant segments.

1.1 Before taking the test

Prior to conforming their software solutions, customers are required to have completed the following tasks:

1. Connect to the V-EUA environment using the [connectivity guidelines document](#) for support. As a reminder, customers MCAs received their access details in August 2017, whereby one session gives access to all segments on Optiq in V-EUA (2 sessions required if the customer is using both FIX and SBE protocols).
2. Develop, test and validate their software solution, using the specifications for support
3. Confirm successful [connectivity to the new Exchange File Server \(EFS\)](#) to access Standing Data Files and new SBE templates per segment. In order to connect to the EFS, customers are required to request their credentials to Customer Access Services by writing to cas@euronext.com
4. Request an appointment for the conformance tests via the Connect portal (detailed further in this document)

1.2 Environment for conformance testing

Customers are invited to test on the Euronext Virtual User Acceptance environment (V-EUA).

Customers can connect to the V-EUA at the following times:

- Monday, Wednesday, Thursday and Friday between 09:00 CET and 18:00 CET
- Tuesday between 13:00 CET and 18:00 CET

1.3 Scope of conformance testing

The conformance testing will consist in two distinct parts: technical and functional conformance:

- The functional conformance testing will allow customers to validate the full scope of the Optiq order entry gateway (OEG), taking into account all message types that will be offered. This testing will be made available across all markets, and across all product types.
- The technical testing will present several different types of failures, and customers will be expected to manage each failure appropriately.

Euronext offers conformance tests based on the Trading Member's chosen software development set-up:

Software development:	Member developer	Member developer also using a provider (ISV and ASP)	Liquidity Provider using a provider only (ISV and ASP)	Trading Member using a provider only (ISV and ASP)	Provider (ISV and ASP)
Full / Light conformance¹	Full	Full	Light	Light	Full
Mandatory / optional	Mandatory	Mandatory	Mandatory	Optional	Mandatory

Conformance testing is available in the **V-EUA environment** and customers will need to conform **each of their solution on each member code for each protocol and on each Euronext market:**

- Cash Regulated Markets (mandatory if customers trade Fixed Income, Equities and/or ETFs)

¹ **Full Conformance:** This test examines all functional and high-availability messages available for the platform and market the client is conforming to.

Light Conformance: During light conformance testing, only limited functional messages are tested. This conformance testing is only required for clients using a technology provider's trading solution.

- Warrants (mandatory if customers trade Warrants)
- Trade Confirmation System (TCS) (mandatory if customers use order entry to access TCS)

In addition, customers are also required to perform **technical testing** (high availability) and to validate it prior to accessing the Production environment. Further details on the timing and sequence of High Availability will be provided shortly.

1.4 Making an appointment to pass a conformance test

Customers are invited to book a conformance test appointment with an Optiq analyst using the following form on the Connect portal: <https://connect2.euronext.com/en/form/optiq-s2-conformance-booking>

Please note that customers need to fill in the conformance booking form at least 72 hours prior to the desired timeslot. As a reminder, no conformance test will take place on Tuesday morning as the V-EUA platform is closed for maintenance until 13:00 CET

Once the form is submitted, the customer will receive a conformance test invitation from Euronext within 48 hours. Customers will be asked to confirm via email the platform to tests, scope and the functionalities (prior to the meeting).

If the appointment cannot take place at the date and time requested by the customer, Euronext will propose a new appointment.

If the customer plans to conform only part of their solution during this appointment, they will need to book a new conformance test slot for the remaining solution (member code, segment, other).

1.5 During and after the conformance test appointment

During the conformance test, the Optiq analyst will guide and support customers through the different conformance steps. The basis for the test will be the [conformance scripts](#).

As described above, Euronext offers full and light conformance tests, depending on the type of trading member conforming their software. A full conformance test takes approximately 1h-1h30 and that a light conformance test takes approximately 30-45 minutes.

If the conformance test is passed successfully, the customer will be invited to perform High Availability testing if not performed already. Once the High Availability test is validated, the customer will receive a conformance certificate(s) per protocol.

If the customer faces issues during the conformance test that are related to their development of the software, the Optiq analyst will end the conformance test and ask the customer to make a new conformance appointment once the software is developed and tested again.

ASSOCIATED DOCUMENTS

The following list identifies the [associated documents](#), which either should be read in conjunction with this document, or which provide other relevant information for the user:

- Euronext Cash Markets – Optiq OEG Client Specifications – SBE Interface
- Euronext Cash Markets – Optiq OEG Client Specifications – FIX 5.0 Interface
- Euronext Cash Markets – Optiq TCS Client Specifications – SBE and FIX 5.0 Interface
- Euronext Cash Markets – Optiq Kinematics Specifications
- Euronext Cash Markets – Optiq CCG to OEG Changes Highlight
- Euronext Cash Markets – Optiq & TCS Error List
- Euronext Cash and Derivatives Markets – Optiq File Specification
- Euronext Cash and Derivatives Markets – Optiq MDG Client Specifications
- Euronext EFS service
- Optiq Technical Note SBE
- Conformance tests scripts

GLOSSARY

This section provides a list of some terms & abbreviations commonly used in this document. Please note that some of these terms are described in more details in the dedicated sections within this document or in the associated Optiq specifications documents.

- **Full Conformance:** This test examines all functional and high-availability messages available for the platform and market the client is conforming to.
- **Light Conformance:** During light conformance testing, only limited functional messages are tested. This conformance testing is only required for clients using a technology provider’s trading solution.
- **EFS:** Exchange File Server (EFS) to access Standing Data Files and new SBE templates per segment.
- **Member developer:** has the meaning described to it in the Euronext Trading Platform Agreement
- **Independent Software Vendor (ISV):** means an independent software provider who develops ISV Software (i.e. software that provides an interface between third party software and the Euronext Trading Platform to enable securities and/or derivatives to be traded on the Trading Platform and who provides that software to one or more Members or other service providers.
- **Application Service Providers (ASP):** Means an application service provider who provides hosted service solutions to enable the use of the Euronext Trading Platform.
- **Optiq Segment:** defines a universe of instruments habitually sharing common trading properties. An Optiq Segment can contain one or several asset classes. An Optiq Segment access is setup through a Logical Access

2. SUPPORT

For further information relating to this document as well as the Optiq programme, please contact the customer support teams below, available Monday – Friday from 09:00 to 18:00 CET. Alternatively, please contact your relationship manager at ccc@euronext.com.

Team	Contact details
Optiq Support Desk For information relating to this document and the overall Optiq programme	<ul style="list-style-type: none">■ Tel: +33 1 70 48 25 55■ Email: optiq@euronext.com
Customer Technical Support Group For technical support throughout the testing period	<ul style="list-style-type: none">■ Tel: +33 1 85 148 588■ Email: CTSG@euronext.com
Customer Access Services For questions related to access and log-in to test and Production environments	<ul style="list-style-type: none">■ Tel: +33 1 8514 8589■ Email: CAS@euronext.com