



Editorial note

Euronext announced the launch of its new generation technology programme in May 2016, which will deliver improved customer experience through the migration from its current technology platform Euronext UTP to its new leading edge platform: **Optiq**®.

This monthly newsletter will be sent to provide key updates and information on the progress of the programme, communicate important programme announcements, showcase new functionalities delivered by the new platform, and provide updates on the migration timeline and key milestone status.

Euronext has revised the migration strategy and timelines for the Euronext Optiq and MiFID II programmes. MiFID II requirements will be deployed first on the Universal Trading Platform (UTP) in 2017, for both Euronext Cash and Derivatives markets. As a result, the delivery of Euronext's MiFID II requirements for Cash will no longer be dependent on the release of the new Optiq trading platform. The Optiq migration programme will subsequently be delivered in 2018. Benefits of this revised migration strategy include reducing system complexity in relation to MiFID II enhancements and managing the risk around the number of changes to be made by customers in Q4 2017.

Phase 2 of the Optiq programme which includes the Order Entry Gateway (OEG) and Matching Engine (ME) upgrades for Cash markets will begin in August 2017 with the opening of the test platform, and will be delivered in production on **12 March 2018**.

This month's New Features Spotlight will focus on the improvements to timestamps in the Optiq trading environment.

Keep reading for details on these important announcements, as well as an overview of current and future program milestones.

Timeline and milestone status



What's next

To be ready for the migration into Production, customers are required to:

- 1. Finalize XDP feed decommissioning and complete migrations onto Optiq MDG feeds.
- 2. Begin Phase 2 testing for Cash Order Entry Gateway and Matching Engine on V-EUA.
- 3. Liaise with the Client Readiness team for the Phase 2 order entry and connectivity consultations
- 4. Contact the Optiq support desk with any questions

Milestones:

(recent past + next 30 days)

July 2017:	Phase 1: MDG Derivatives final dress rehearsal
	Phase 1: Go-Live MDG Cash
	Phase 1: MDG Derivatives pre-production launch
	Phase 2: New migration dates published
	Phase 2: TCS SBE and FIX 5.0 specifications published
August 2017:	Phase 1: Go-live MDG Derivatives
	Phase 1: XDP Cash decommissioning
	Phase 2: OEG Cash connectivity details available
	Phase 2: OEG V-EUA connectivity (telnet) testing available
September 2017:	Phase 2: First EUA release available for testing
	Phase 1: XDP Derivatives decommissioning
	Phase 2: OEG Cash Migration Guidelines published
	Phase 2: Updated MDG specifications
	Phase 2: Drop copy and End of Day (EOD) documentation to be published
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Migration Strategy

We are pleased to provide an update of important elements of the **Optiq migration strategy**, including a revised timeline.

Overview

The Cash MDG pre-production period began on Monday 19 June 2017 as scheduled and without incident. Significant performance and latency improvements have been observed, as well as overall improved feed stability. This represents a major accomplishment in the Optiq migration programme. The market data upgrade will conclude with the launch of Derivatives MDG August 2017. Phase 2 of the programme which includes the Order Entry Gateway (OEG) and Matching Engine (ME) upgrades for Cash markets will begin in August 2017 with the opening of the test platform for connectivity testing, and will be delivered in production on 12 March 2018. Additional details will be provided via Info-Flash in due course.

The following table summarizes the Optiq programme milestones:

	OPTIQ MIGRATION		
	Specifications: 1st release	EUA platform	Production platform
MDC Cook & Domivatives	13 July 2016	29 November 2016	10 1 2 20 A
MDG Cash & Derivatives	13 July 2016	27 November 2016	10 July & 28 August 2017
OEG & ME Cash	31 October 2016	August 2017	12 March 2018

As a reminder, the following table summarizes the Phase 1 (Market Data Gateway for Cash and Derivatives markets) migration milestones:

MILESTONE	DATE	
Start of conformance testing	mid-April 2017	
End of conformance testing	15 May 2017	
1st dress rehearsal	03 June 2017	
2nd dress rehearsal	10 June 2017	
3rd dress rehearsal	17 June 2017	
MDG Cash: start of pre-production period	19 June 2017	
Go-live of MDG Cash (start of parallel run)	10 July 2017	
4th dress rehearsal	22 July 2017	
MDG Derivatives: start of pre-production period	24 July 2017	
XDP Cash decommissioning	25 August 2017	
Go-live of MDG Derivatives (start of parallel run)	28 August 2017	

Important note: it is mandatory that clients maintain connectivity to the XDP market data feed until Optiq MDG becomes the primary Euronext market data feed. Clients with 100Mbps and 1Gbps connections should be mindful that due to line capacity, they could be exposed to packet loss if subscribing simultaneously to both XDP and MDG Cash and Derivatives feeds.

New features spotlight

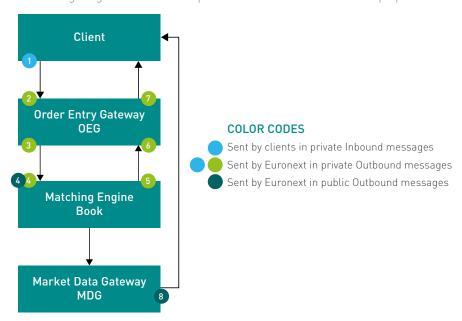
August 2017: Timestamps in Optiq

Optiq will deliver an improvement in the data and format of timestamps within private messages that identify the events occurring in the market. With the UTP trading platform, timestamps were only available in microseconds (µs), while with Optiq they are provided in number of nanoseconds (ns) after Unix epoch (since 1970, January the 1st). All timestamps in Optiq will be in UTC to match MiFID II requirements.

Once Phase 2 has been delivered in Production, Euronext Cash markets (including the full trading chain: MDG, OEG and ME) will use the Precision Time Protocol (PTP) as per MiFID II requirements. PTP is a protocol (documented by IEEE in standard 1588) used to synchronize clocks in the computing infrastructure, using computer networks. PTP is used in mission critical applications as it has a higher level of granularity (as compared to NTP) and has built in provisions to eliminate network and equipment jitter. The PTP timescale is defined in seconds and nanoseconds, with the common assumption that the POSIX timescale with origin 1 January 1970 is used. The PTP accuracy of synchronized clocks is in the range of 100 ns.

Inbound and outbound messages in private and public data in Optiq carry several timestamps. Some of these are provided by clients, and some are internal values provided by Optiq to allow the clients to monitor the processing time of the system at different levels.

The following diagram and table represents the different timestamps provided in the outbound messages:



In the Optiq environment, both private and public messages contain many more timestamp fields which will allow members to more efficiently monitor latency of private and public messages, and may assist clients in identifying missed opportunities.

More details can be found in the August 2017 Technical Note, available in the **documentation** section of the Optiq website.

NEWS

- The transition to MDG for Cash markets is now complete and all clients should now be using the new Optiq Cash market data feed in production. MDG Derivatives is now the primary feed as well, and will be decommissioned in September 2017.
- 2. New migration dates for Optiq Phase 2 are now available.
- 3. New fee scheme for Phase 2 Order Entry Gateway (Cash) has been published, which outlines the new Order Entry Session (OES) fees which will be implemented when Cash markets migrate to Optiq.

CONTACT DETAILS

For additional information, please reach out to your Optiq Programme client readiness team

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